



MARYLAND DEPARTMENT OF TRANSPORTATION
MARYLAND HIGHWAY SAFETY OFFICE

2017

ANNUAL REPORT

MDOT
MARYLAND DEPARTMENT
OF TRANSPORTATION
MOTOR VEHICLE
ADMINISTRATION

Maryland
Highway
Safety
Office

EVERY LIFE COUNTS.

The philosophy of the Maryland Highway Safety Office (MHSO) is embodied in these three simple words. They form the basis of our mission and drive each member of the office in our quest to move Maryland *Toward Zero Deaths*. Every crash is preventable, every injury avoidable. It is ultimately up to each motorist, passenger, bicyclist, pedestrian, and motorcyclist to do their part to save lives.

The Maryland Highway Safety Office's Annual Report is a visual representation of the numbers that represent outcomes of traffic safety efforts coordinated throughout the State. But lives lost in crashes are not merely numbers. They're our parents, children, siblings, grandparents, friends, and coworkers. The impact of their injury or death is very real and devastating to our families and communities.

We honor the memories of these crash victims and remain steadfast to preventing needless tragedies from occurring on Maryland roadways.

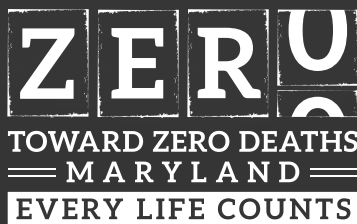


TABLE OF CONTENTS

MARYLAND HIGHWAY SAFETY OFFICE	4
A Message from the Governor's Highway Safety Representative	4
A Message from Maryland's Highway Safety Coordinator	5
Mission and Vision	6
Funding	7
Our Organization.....	8
Highlights	9
LAW ENFORCEMENT AND EDUCATION/OUTREACH GRANTEES.....	12
STRATEGIC HIGHWAY SAFETY PLAN AND PROGRAM AREA MEASURES	15
PROGRAM AREAS	34
Impaired Driving.....	34
Occupant Protection	38
Aggressive Driving	42
Distracted Driving.....	44
Pedestrian and Bicycle Safety	46
Motorcycle Safety	48
Younger and Older Driver Safety	50
Law Enforcement Services	52
Traffic Records.....	54
Communications and Social Media.....	60
LOOKING TO THE FUTURE	63
GRANTS AND SPENT AMOUNTS.....	64

A MESSAGE FROM THE GOVERNOR'S HIGHWAY SAFETY REPRESENTATIVE



Christine Nizer,
Maryland Motor Vehicle Administrator &
Governor's Highway Safety
Representative

As Administrator of the Maryland Department of Transportation Motor Vehicle Administration (MDOT MVA) and Governor Larry Hogan's Highway Safety Representative, I understand the importance of safety on our roadways. I am honored to have the opportunity to work with partners on the federal, state and local levels to develop strategies and initiatives that aim to reduce—and ultimately eliminate—the number of preventable deaths due to car crashes.

I am fortunate to have the support and guidance of two dynamic leaders in Governor Hogan and Transportation Secretary Pete K. Rahn, who have a strong and unquestionable commitment to highway safety. Through their leadership, a statewide effort was launched to help Maryland's 24 jurisdictions create local road safety plans to move Maryland *Toward Zero Deaths*.

In this time of rising roadway fatalities and injuries, both nationally and in Maryland, local plans that target community-specific issues are critical to supporting our State's Strategic Highway Safety Plan (SHSP). This five-year plan is our roadmap to cutting the number of Maryland roadway fatalities in half by 2030.

The SHSP lives and breathes through the leadership of the staff at the Maryland Highway Safety Office (MHSO), which brings together our federal partners at the National Highway Traffic Safety Administration along with state and local partners to plan, implement, and evaluate proven lifesaving strategies. This collaboration is the foundation for our comprehensive campaigns to educate Marylanders about the dangers of impaired, aggressive, and distracted driving and to enhance pedestrian, occupant, and motorcyclist safety.

Data guides the important work that we do every day, however, behind every statistic is a person and a community whose lives are shattered when a tragic crash occurs. We collectively are a community of people brought together for a common purpose: *to end the senseless loss of life on our roadways*. I want to thank all our highway safety partners for their dedication to this mission. I am proud to work with you side by side in this critical, lifesaving work. Together, we can achieve zero fatalities, because every life counts.

A handwritten signature in black ink that reads "Christine Nizer".

Christine Nizer

A MESSAGE FROM MARYLAND'S HIGHWAY SAFETY COORDINATOR



Thomas J. Gianni,
Chief, Maryland Highway Safety Office

In serving as Maryland's Highway Safety Coordinator and Chief of MDOT's Maryland Highway Safety Office (MHSO), I have the privilege of managing our grant-funded efforts dedicated to reducing and ultimately eliminating deaths on our roadways. It is this dedication to the mission of saving lives, both within the MHSO and through our partners, that paved the way for past reductions in traffic injuries and fatalities and will serve to address existing and future challenges in highway safety.

Maryland is seeing record vehicle miles traveled (VMT) – in fact, more than two billion more VMT than in 2014. Even as an improving economy increases motorist exposure, addressing high-risk driving behaviors is critical to reducing crashes since the driver remains the most important safety feature in a vehicle. This Annual Report reflects the programs set forth in our FFY 2017 Highway Safety Plan (HSP). To achieve any degree of success, our programs require a comprehensive approach by the entire MHSO team to analyze relevant data, establish short- and long-term goals, engage our statewide partners in effective strategies and countermeasures, and continuously evaluate progress. Highway safety projects funded with federal grant dollars are fully aligned with the strategies contained in our State's SHSP.

At the same time, we can never just rely on “what we’ve always done.” Maryland's *Four Es* approach (engineering, enforcement, education, and EMS) to traffic safety helps us refine ongoing projects as well as identify new projects that bring innovative lifesaving perspectives and potential. Our team currently is investigating the benefits of predictive modeling in helping to better identify the factors that affect traffic fatalities – and to pinpoint those factors over which we may exert some influence.

Through the FFY 2017 HSP, a total of 107 projects received nearly \$13.3 million in grant funding. I am pleased with the progress illustrated in this report, and I extend my gratitude to all who make continued progress possible.

The MHSO remains committed to assisting our partners in our shared mission to develop a safety culture in every community and drive Maryland *Toward Zero Deaths*.

A handwritten signature in black ink, appearing to read "Thomas J. Gianni". The signature is fluid and cursive, written on a light-colored background.

Thomas J. Gianni

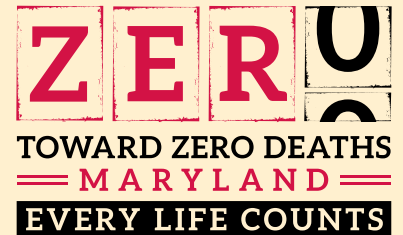
MARYLAND HIGHWAY SAFETY OFFICE MISSION & VISION

MISSION

The MDOT Maryland Highway Safety Office is dedicated to saving lives and preventing injuries by reducing motor vehicle crashes through the administration of a comprehensive network of traffic safety programs.

VISION

Moving Maryland *Toward Zero Deaths* since death is not an acceptable consequence of driving.



ORGANIZATIONAL STATEMENT

The MDOT Maryland Highway Safety Office endeavors to provide expert highway safety leadership through quality programs, ethical grants management, professional and accountable staff, and exemplary customer service.

OUR VALUES

1. **Life** – Even one person lost or injured on our roadways is too many.
2. **Professionalism** – We seek to be leaders, innovators, and facilitators in the highway safety arena; the MHSO management team is committed to assisting employees to realize their full potential through training and professional development.
3. **Respect** – People are our greatest resource. We welcome and respect the ideas and opinions of our staff, stakeholders, and the public; we respect individual differences and diversity within the state.
4. **Integrity** – We are honest and ethical in our dealings and strive to perform in a manner consistent with achieving trust among the community.
5. **Dedication** – We are steadfastly dedicated to pursuing our vision and mission.
6. **Excellence** – We achieve results by evaluating our efforts and continually improving the quality of our work.
7. **Performance Management** – We are committed to analyzing available data to maximize the effectiveness of programs, personnel, and funding, and to create strategies that result in desired outcomes.
8. **Teamwork** – We strive to function as a cohesive unit at the statewide and local levels to provide the best possible impact for programs and funding.
9. **Customer Focus** – We seek to provide premier customer service.
10. **Collaboration** – The MHSO's management and staff value the input of stakeholders and seek to capitalize on the knowledge and experience of partner organizations to help accomplish our mission.

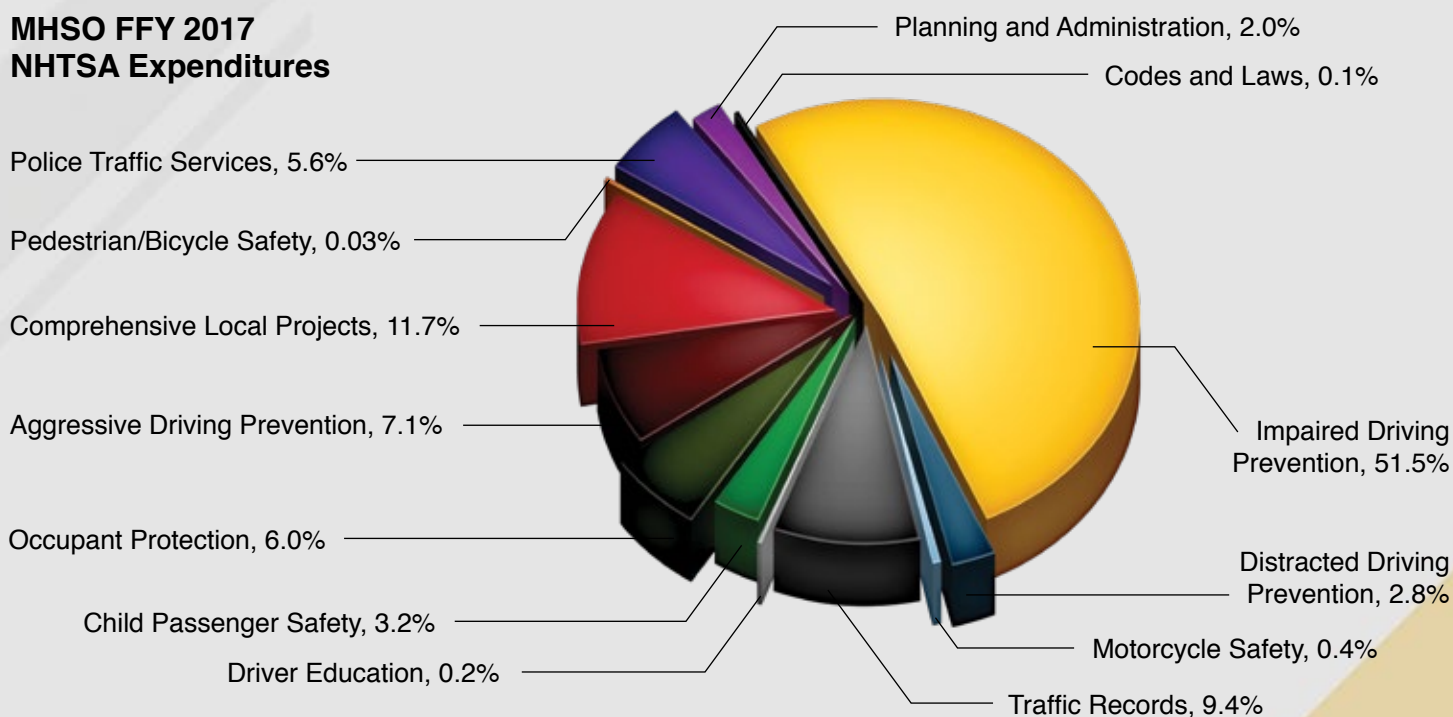
MARYLAND HIGHWAY SAFETY OFFICE FUNDING

The MHSO receives funding from the NHTSA for use at the statewide and local levels. The Highway Safety Act of 1966 authorized the first federal highway safety program: the State and Community Highway Safety Grant Program (Section 402). Since then, Congress has revised national highway safety grant programs many times through reauthorizing legislation, creating new incentive grants, penalties, and sanctions. Maryland's highway safety program is funded through federal appropriations, and state laws can impact the amount and type of funding the state receives. The Fixing America's Surface Transportation Act is the surface transportation bill that authorizes the federal transportation programs, including Maryland's highway safety program.

The MHSO submits its plan for allocating these funds to the National Highway Traffic Safety Administration by way of an HSP. The MHSO utilizes formulas and strategic planning models to allocate these funds into the jurisdictions and grant-funded projects that are evaluated as having the best potential at meeting the State's traffic safety goals, also outlined in the State's HSP.

The percentage of funds expended by program area is provided below:

MHSO FFY 2017 NHTSA Expenditures



Note: The figures above represent only funds from the NHTSA. In addition, the MHSO distributes a variety of State funds for highway safety programming.

2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT



OUR ORGANIZATION

Serving as the Governor's Highway Safety Representative and Administrator of the Maryland Department of Transportation (MDOT) Motor Vehicle Administration (MVA), Christine Nizer provides overall leadership for the State's highway safety program. The MHSO Chief and Deputy Chief report directly to Administrator Nizer and manage a team of nearly 30 professionals, including a Communications Manager; a Business Services Specialist; a Safety Programs Section; a Law Enforcement Services Section; a Partnership, Resources, and Outreach Section; and a Finance Section.

Safety Programs is comprised of a Section Chief and four Program Managers who specialize in Occupant Protection/ Distracted Driving Prevention, Impaired Driving Prevention, Aggressive Driving Prevention/Motorcycle Safety, and Pedestrian/Bicyclist Safety. This section also includes a Traffic Records Program Manager, who oversees the State Traffic Records Coordinating Committee (TRCC).

The Law Enforcement Services Section works directly with the police community across Maryland to increase and maintain support for highway safety and to assist in managing law-enforcement related highway safety grants. Managed by a Section Chief, this section includes four Law Enforcement Liaisons (LELs) and a Law Enforcement Manager.

The Partnerships, Resources, and Outreach Section includes a Section Chief and four team members who have responsibility for engaging local highway safety partners, as well as for furthering the implementation of local SHSPs. The section staff manages outreach programs for large employers, military installations, schools and universities, and younger and older drivers.

DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

Led by a Finance Chief, the Finance Section manages and coordinates all the financial operations and grants administration within the MHSO. The section includes a newly formed Grants Management team – a highly technical function not employed previously within the office – as well as two Finance Managers, a Contracts Manager, and a Data Processing Quality Assurance Specialist.

The Communications Manager establishes the strategic direction for MHSO communications efforts, including education/media campaigns, correspondence, and social media platforms. Working closely with office staff, MVA Communications, and other partners, the Communications Manager provides further exposure for highway safety efforts through public relations, and earned and new media.

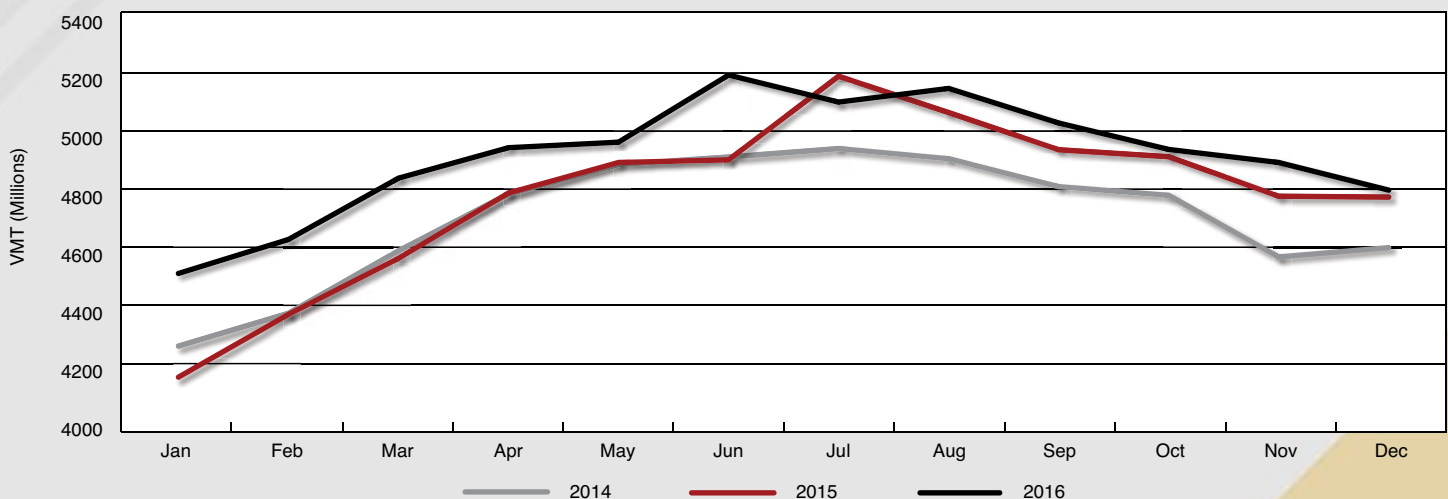
The Business Services Specialist is a multi-faceted position that provides guidance, resources, and office support to the entire MHSO Team.

HIGHLIGHTS

Nationally, 37,461 people died on U.S. roads in 2016, an increase of 5.6 percent from calendar year 2015. The number of vehicle miles traveled (VMT) on U.S. roads in 2016 increased by 2.2 percent, and resulted in a fatality rate of 1.18 deaths per 100 million VMT – a 2.6-percent increase from the previous year.

After a sharp increase from 2014 to 2015, the number of deaths on Maryland roads rose by one from 521 in 2015 to 522 in 2016. Maryland saw a relatively consistent number of highway deaths from 2015 to 2016, increasing by one over the previous year total to 522 in 2016. Like much of the country, Maryland has seen a marked increase in VMT. Total miles traveled increased nearly three percent from 2015 to 2016 and more than four and a half percent since 2014. These increases mean that 1.6 billion more miles were driven on Maryland roads in 2016 compared to 2015, and more than 2.5 billion miles more were traveled since 2014.

Estimated Monthly Distribution of Annual Vehicle Miles Traveled



Data Source: Based on data collected at approximately 61 continuous count stations maintained by MDOT State Highway Administration's Data Services Division.

2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT



Secretary Rahn discussed the importance of the SHSP.

In April, the MHSO hosted the 2017 SHSP Summit at the Maritime Institute Conference Center. The focal point for this event, which featured traffic safety advocates and officials from throughout the State, was to engage local jurisdictions to find ways to reversing the upward trend in fatalities and injuries. Approximately 150 people attended the event, which also featured an afternoon symposium devoted to drugged driving. Presentations included performance targets for the State and a sample jurisdiction, demonstrating the importance of local participation in SHSP. A media event was held

in conjunction with the SHSP Summit to announce Maryland's number of traffic fatalities in 2016. Media coverage included television, radio, and print media outlets, and the event featured MDOT MVA Administrator Christine Nizer as emcee, with MDOT Secretary Pete Rahn and Maryland Transportation Authority (MDTA) Police Chief, Colonel Jerry Jones, providing remarks.



MDOT Secretary Rahn, flanked by officers, delivered the unfortunate news that 522 people lost their lives on Maryland roads in 2016.

Maryland has been very active in recruiting local jurisdictions to create and implement SHSP's that meet their specific needs and compliment the State's efforts. The success of these plans requires the full support and involvement of partners and stakeholders at the local level. Three Maryland counties - Prince George's, Washington, and Montgomery County - currently have local plans that also serve as blueprints for other counties to examine and emulate. More than half of Maryland's jurisdictions are in the process of, or have expressed interest in, developing a county SHSP. The development of these plans has been, and will continue to be, a priority for Transportation Secretary Pete Rahn and the MHSO.

Maryland's Mobile Breath Alcohol Truck (MBAT), funded by the MHSO in coordination with the Maryland State Police (MSP), marked its first full year of deployment. The MBAT was featured at several press conferences, including one for the MSP DUI team, known as SPIDRE.



The Strategic Highway Safety Plan Panel (L to R: John Martin, Washington County Sheriff's Department; Eric Randall, TPB; Karyn McAllister & Kate Mazzara, Prince George's County)

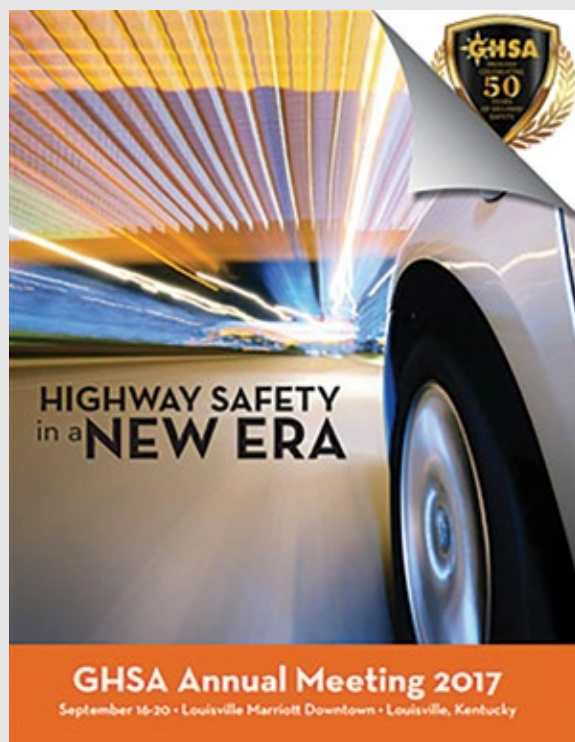
DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

More importantly, MBAT was utilized at numerous checkpoints throughout the year. Between December 2016 and September 2017, the MBAT was used to support 15 sobriety checkpoints and three DUI saturation patrol operations conducted by the MSP and allied agencies. Law enforcement conducted evidentiary breath tests 37 times on 41 individuals during enforcement operations.

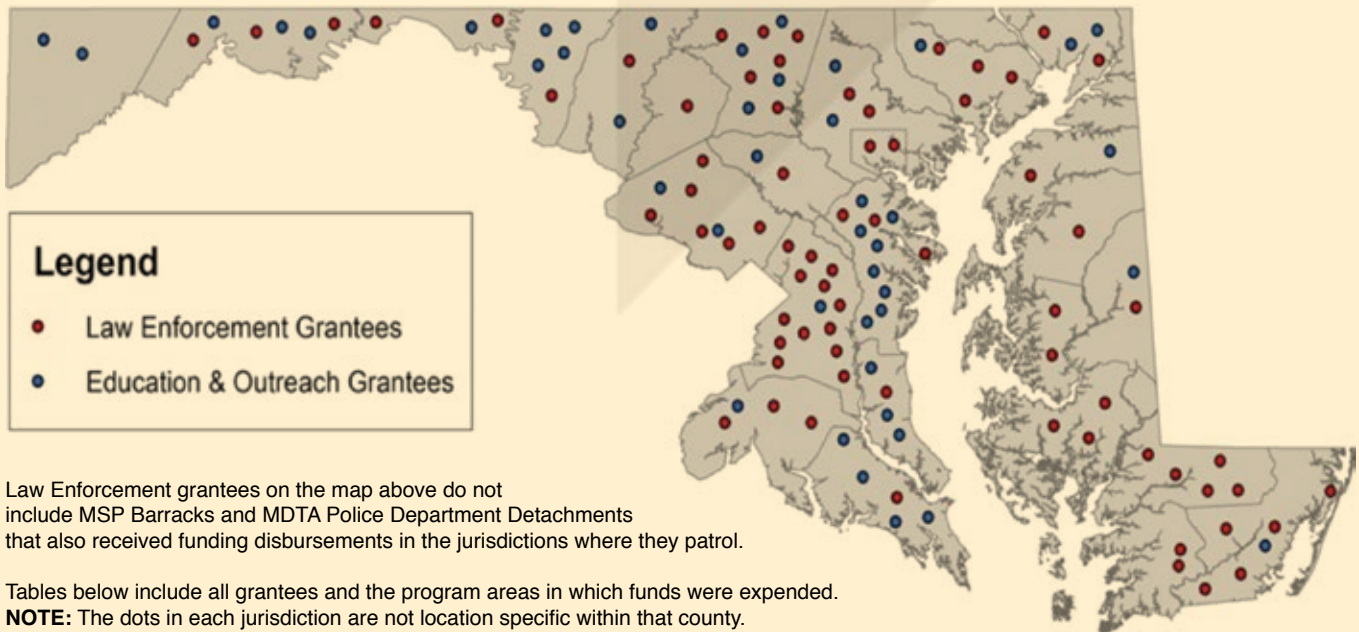
Throughout the year, the MHSO continued to expand its relationships with many national traffic safety organizations, including the Federal Highway Administration (FHWA), the NHTSA, the Governor's Highway Safety Association (GHSA), and the National Governors Association (NGA). The MHSO has created webinars for those groups and has provided support for a variety of highway safety projects. The 2017 GHSA Conference was the perfect example of these partnerships, as it provided the opportunity for MHSO to engage top law enforcement executives to consider ways in strategically refining the way law enforcement agencies implement traffic enforcement strategies.

Three MHSO team members were recognized for their dedication and commitment to traffic safety:

- Julie Maione, the MHSO's Partnership, Resources and Outreach Manager, was recognized with the MHSO Olympian Award for the second year in a row. Given by peers, the Olympian Award was the culmination of Julie's continued commitment to helping coworkers and for being an invaluable part of the MHSO team.
- The MHSO's Step Up Award was presented to Laurie Dell of the MHSO's Finance Team. Laurie received the award for her willingness to take on new projects as requested by management and for her timeliness in successfully completing those projects.
- The Finance Team received the MHSO Chief's Award for their development of user-friendly grants software, as well as for their commitment in maintaining the extensive financial needs of the office's grants program and partners.



REGIONAL LAW ENFORCEMENT & EDUCATION/OUTREACH GRANTEES



			Aggressive Driving Prevention	Distracted Driving Prevention	Impaired Driving Prevention	Occupant Protection	Pedestrian & Bicycle Safety	Special Projects
Allegany	Law Enforcement	Cumberland Police Department	X	X	X	X		
		Frostburg State University Police		X	X	X		
		Allegany County Sheriff's Office	X	X	X	X	X	
Anne Arundel	Law Enforcement	Anne Arundel County Police Department	X	X	X	X	X	
		City of Annapolis Police Department	X	X	X	X	X	
	Education & Outreach	Anne Arundel County Department of Health			X			
		Anne Arundel County Council of PTAs			X			
		Maryland Judiciary - AA County DUI Court			X			
Baltimore	Law Enforcement	Baltimore County Police Department	X	X	X	X	X	X
	Education & Outreach	Baltimore County Police Department						X
		Baltimore County Department of Health			X			
Baltimore City	Law Enforcement	Baltimore Police Department	X		X	X		
Calvert	Law Enforcement	Calvert County Sheriff's Office	X	X	X	X		X
	Education & Outreach	Calvert Alliance Against Substance Abuse			X			

DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

			Aggressive Driving Prevention	Distracted Driving Prevention	Impaired Driving Prevention	Occupant Protection	Pedestrian & Bicycle Safety	Special Projects
Caroline	Law Enforcement	Caroline County Sheriff's Office	X	X	X			
Carroll	Law Enforcement	Westminster Police Department	X	X	X	X		
		Carroll County Sheriff's Office	X	X	X	X	X	
		Sykesville Police Department	X		X			
		Hampstead Police Department	X		X			
		Taneytown Police Department	X		X			
	Education & Outreach	Sykesville Freedom District Fire Department			X			
Cecil	Law Enforcement	Cecil County Sheriff's Office	X		X	X	X	
		Elkton Police Department	X		X			
Charles	Law Enforcement	Charles County Sheriff's Office	X	X	X	X	X	
		Town of La Plata Police Department	X	X	X	X		
Dorchester	Law Enforcement	Cambridge Police Department	X		X			
Frederick	Law Enforcement	Frederick Police Department	X	X	X			
Harford	Law Enforcement	Havre de Grace Police Department	X		X			
		Harford County Sheriff's Office	X	X	X	X		X
		Bel Air Police Department	X		X		X	
		Aberdeen Police Department	X		X	X		
		Education & Outreach	Harford County DUI Court			X		
Howard	Law Enforcement	Howard County Police Department	X	X	X			X
	Education & Outreach	Maryland Judiciary - Howard Co. DUI Court			X			
Kent	Law Enforcement	Kent County Sheriff's Office	X	X	X	X		
Montgomery	Law Enforcement	Chevy Chase Village Police		X				
		Rockville Police Department	X	X	X	X	X	
		Gaithersburg Police Department	X	X	X	X		
		Montgomery County Sheriff's Office			X			
		Montgomery County Police Department	X	X	X	X	X	X
		M-NC Park Police, Montgomery Co. Div.	X		X			
Prince George's	Law Enforcement	University of Maryland Dept. of Public Safety	X	X	X	X	X	
		Laurel Police Department	X	X	X			
		Greenbelt Police Department	X	X	X	X		
		University Park Police Department			X		X	
		Cheverly Police Department	X	X	X	X		
		New Carrollton Police Department			X			
		City of Hyattsville Police Department	X		X			
		Prince George's County Police Dept.	X	X	X	X	X	
		Riverdale Park Police Department			X		X	
		City of Bowie Police Department	X	X	X	X		

2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

			Aggressive Driving Prevention	Distracted Driving Prevention	Impaired Driving Prevention	Occupant Protection	Pedestrian & Bicycle Safety	Special Projects
Queen Anne's	Law Enforcement	Queen Anne's County Sheriff's Office	X		X			
Somerset	Law Enforcement	Princess Anne Police Department	X		X		X	X
		Somerset County Sheriff's Office			X			
St. Mary's	Law Enforcement	St. Mary's County Sheriff's Office	X	X	X	X		X
	Education & Outreach	St. Mary's County Circuit Court			X			
Talbot	Law Enforcement	Talbot County Sheriff's Office	X		X			
		Easton Police Department	X	X	X			
Washington	Law Enforcement	Washington County Sheriff's Office	X	X	X	X		
		Hagerstown Police Department	X	X	X	X		
Wicomico	Law Enforcement	Wicomico County Sheriff's Office	X		X			
		Salisbury Police Department	X		X	X		
Worcester	Law Enforcement	Ocean City Police Department	X	X	X	X	X	X
		Worcester County Sheriff's Office	X		X			X
		Berlin Police Department	X		X			
	Education & Outreach	Worcester County Health Department			X	X		
Statewide	Law Enforcement	Maryland State Police Statewide - Regular	X	X	X	X	X	X
		Maryland State Police Statewide - SPIDRE			X			
		Maryland Transportation Authority Police	X	X	X	X		X
	Education & Outreach	Chesapeake Region Safety Council						X
		Maryland Chiefs of Police Association			X			X
		Maryland DOH				X		
		Maryland Institute for Emergency Services, CPS				X		
		Maryland Municipal League PEA						X
		Maryland MVA, Motorcycle Safety						X
		Maryland Police and Correctional Training Ctr.						X
		Maryland Sheriffs Association			X			X
		Maryland State Police - DRE			X			
		Maryland State Police - IT Division						X
		Maryland State Police - BAT			X			
		Maryland State's Attorneys' Association			X			
		Metropolitan Washington Council of Governments					X	
		Mothers Against Drunk Driving			X			
		Motor Vehicle Administration - Driver Safety						X
		Motor Vehicle Administration - Driver Instruction						X
		University of Maryland, Baltimore, NSC	X	X	X	X	X	X
		Washington College			X			X
		Washington Regional Alcohol Program			X			

STRATEGIC HIGHWAY SAFETY PLAN & PROGRAM AREA MEASURES

In 2016, 522 people were killed in more than 120,000 police-reported traffic crashes in Maryland, while 50,864 people were injured and 84,955 crashes involved property damage only. In total, 315 drivers (247 vehicle drivers and 68 motorcycle operators), 127 pedestrians and bicyclists, and 80 passengers were killed on Maryland roads. On average, one person was killed every 17 hours, 139 people were injured each day (6 injuries every hour), and 329 police-reported traffic crashes occurred every day.

Statewide Total Crashes, Injury Crashes, Fatal Crashes, Injuries & Fatalities						
	2012	2013	2014	2015	2016	% Change from 2012
Fatal Crashes	462	432	417	480	483	+4.55%
Injury Crashes	30,516	29,236	30,369	30,655	34,682	+13.65%
Property Damage Only	59,542	62,937	67,165	76,654	84,955	+42.68%
Total Crashes	90,520	92,605	97,951	107,789	120,120	+32.70%
Total of All Fatalities	511	466	443	521	522	+2.15%
Total Number Injured	44,398	42,757	44,158	44,816	50,864	+14.56%

Source: Crash data are obtained from the State Highway Administration which maintains a database derived from crash reports submitted to, and processed and approved by, the Maryland State Police. Data are subject to change.

The five-year fatality rate trend for Maryland increased from a low of 0.785 in 2014 to a high of 0.909 in 2015, but there was a slight decrease to 0.885 in 2016. The overall fatality rate has consistently been lower than the national fatality rate every year since 1992.

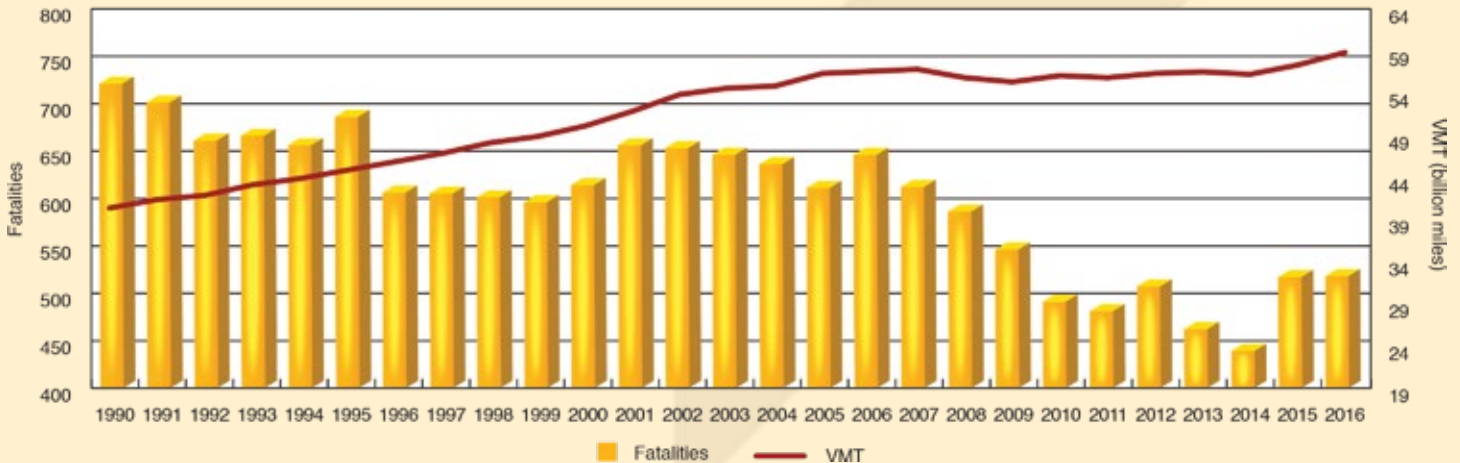
Fatality Rate, Vehicle Miles Traveled, Maryland and National, 2012–2016				
Year	VMT (billion miles)	Fatalities*	Fatality Rate*	National Fatality Rate**
2012	56.5	511	0.906	1.14
2013	56.7	466	0.825	1.10
2014	56.4	443	0.785	1.08
2015	57.5	521	0.909	1.15
2016	59.0	522	0.885	N/A

* Sources: State Highway Administration Safety Information Database (SHA-SID)/ Enhanced Maryland Automated Accident Reporting System (eMAARS) and Automated Crash Reporting System (ACRS).

** Source: NHTSA, Fatality Analysis Reporting (FARS) Fatalities per 100 million miles traveled.

2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

Maryland Vehicle Miles of Travel and Traffic Fatality Trends for State and Local Highways



STRATEGIC HIGHWAY SAFETY PLAN TARGETS

Maryland maintains the TZD approach by developing interim targets to reduce fatalities by at least 50 percent in the next two decades (from 592 in 2008 to 296 in 2030).

Considering the federal guidelines detailed in Moving Ahead for Progress in the 21st Century (MAP-21) and the subsequent Fixing America's Surface Transportation (FAST) Act, Maryland executives collaborated on revisions to the target-setting methodology. The initial TZD target remains: 296 fatalities or fewer by 2030. The annual targets for each of the SHSP's six emphasis areas are set using an exponential trend line connecting the historical data to the 2030 target. Five-year averages are used to calculate projections, and the targets for each individual year are taken from the midpoint of the five-year average (e.g., 2017 annual interim target = midpoint of the 2015-2019 average). The same methodology was used for serious injury targets. However, it should be noted that due to significant declines in serious injuries in recent years, the use of historical trends currently puts the State at or below current targets. Finally, this same method was applied to the five performance measures required by the Federal Highway Administration (FHWA): fatalities, fatality rate, serious injuries, serious injury rate, and non-motorized fatalities and serious injuries.

All traffic safety documents in the state of Maryland conform to these methodologies, including the SHSP, the MHSO's Highway Safety Plan (HSP), the SHA's Highway Safety Improvement Plan (HSIP), and the SHA's Commercial Vehicle Safety Plan (CVSP). Additionally, all planning documents developed by the MHSO staff and all State-level reporting to the Governor uses the SHSP emphasis area fatality and serious injury target-setting methodology. Unless otherwise noted, all data are derived from the SHA's Safety Information Databases (SHA-SID) and Traffic Analysis Network Garage (TANG) based on crash reports submitted to, and processed by, the Maryland State Police Central Records Division (MSP-CRD) utilizing the Enhanced Maryland Automated Accident Reporting System (eMAARS) and the Automated Crash Reporting System (ACRS). Data is subject to change. Effective January 1, 2015, all law enforcement agencies were mandated by the MSP to submit all crash reports via ACRS.

Note: Performance measure statements are provided with five-year averages (baseline to 2020 target), and single-year numbers are available in tables on the following pages. On pages 17-19 are the five federally-mandated performance measures to be included in the state's SHSP and HSIP. The three common measures between the HSIP, SHSP, and HSP are included.

DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

NOTE: The source of the fatality information on pages 17-19 (Number of fatalities, fatality rate, and non-motorized fatalities) are from NHTSA's Fatality Analysis Reporting System (FARS) 2016 Annual Report File (ARF) (preliminary; will not match State numbers).

OVERALL STATEWIDE TARGETS¹

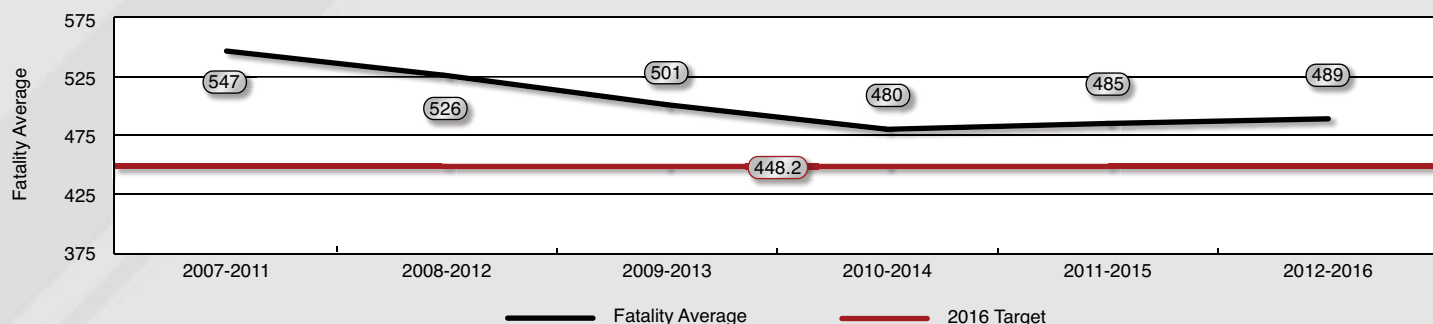
Fatality Target: Reduce the number of traffic-related fatalities on all roads in Maryland from the five-year average (2004 to 2008) of 623 to 397.5 or fewer by December 31, 2020.²

- In 2016, there were 505 fatalities in Maryland. This figure is lower than the 2015 figure of 520, so *Maryland is progressing toward the 2020 target.* [NOTE: the 2016 figure of 505 is preliminary and incomplete (FARS).]

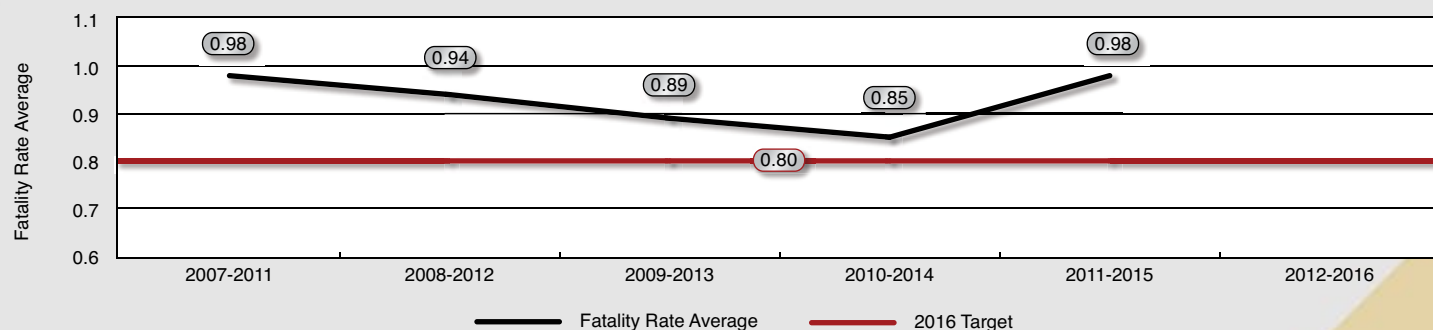
Fatality Rate Target: Reduce the annual rate of traffic-related fatalities per 100 million vehicle miles traveled (MVMT) on all roads in Maryland from 1.11 (2004–2008 average) to 0.712 or lower by December 31, 2020.

- In 2015, Maryland had a fatality rate of 0.90 per 100 MVMT. This figure is higher than the 2014 figure (rate=0.78), so *Maryland is not progressing toward the 2020 target.* [NOTE: 2016 fatality rates by MVMT were not available from FARS at the time of this report's preparation.]

Total Crash Fatalities in Maryland



Total Fatality Rate per 100 Million Vehicle Miles Traveled (VMT) in Maryland



¹ Targets are established for the ultimate aim of a reduction in half from 2008 to 2030. Targets are annual milestones.

² Note: The December 31, 2020 single year target is the mid-year point of the 2018–2022 five-year average. All performance measure target statements will follow this format.

2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

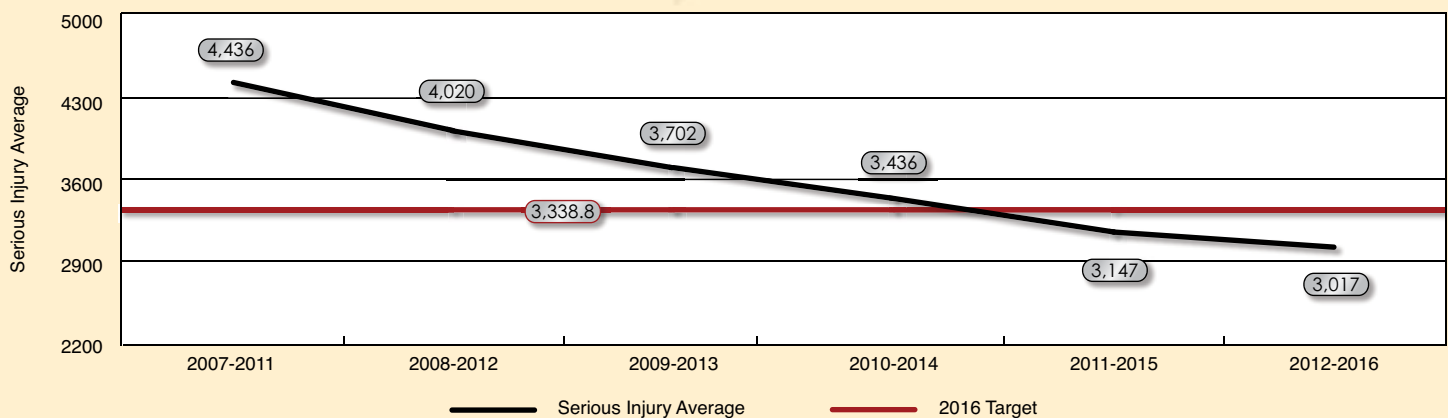
Serious Injury Target: Reduce the annual number of traffic related serious injuries on all roads in Maryland from 6,171 (2004–2008 average) to 2,856.6 or fewer by December 31, 2020.

- In 2016, there were 3,163 serious injuries in Maryland. This figure is higher than the 2015 figure of 2,605, so *Maryland is not progressing toward the 2020 target.*

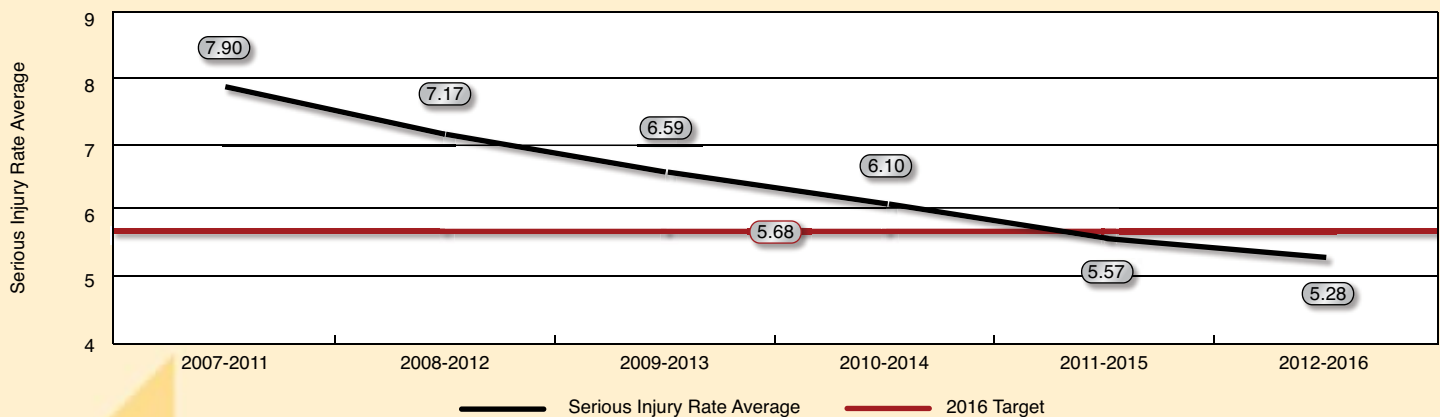
Serious Injury Rate Target: Reduce the annual rate of traffic-related serious injuries per 100 MVMT on all roads in Maryland from 10.97 (2004–2008 average) to 4.798 or lower by December 31, 2020.

- In 2016, Maryland had a serious injury rate of 5.36 per 100 MVMT. This figure is higher than the 2015 figure of 4.55, so *Maryland is not progressing toward the 2020 target.*

Total Crash Serious Injuries in Maryland



Total Serious Injury Rate per 100 Million Vehicle Miles Traveled (VMT) in Maryland



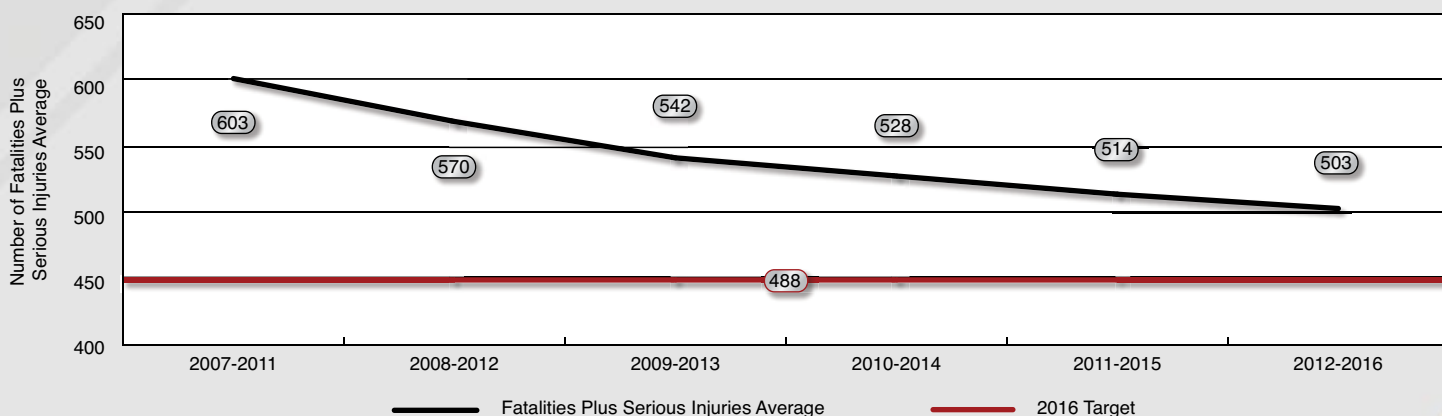
**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**



Target: Reduce the number of non-motorized Maryland fatalities plus serious injuries on all roads in Maryland from 685 (2004–2008 average) to 433 or fewer by December 31, 2020.

- In 2016, there were 604 non-motorized fatalities and serious injuries in Maryland. This figure is higher than the 2015 figure of 476, so *Maryland is not progressing toward the 2020 target.*

Non-Motorized Fatalities Plus Serious Injuries



The following program area targets are based on a five-year rolling average using an exponential trend to set future interim targets. Unless otherwise noted, all data are derived from the State Highway Administration which maintains a database derived from crash reports submitted to, and processed and approved by, the Maryland State Police. Data are subject to change.

2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

IMPAIRED DRIVING FATALITIES

Fatality Targets: (Federal) Alcohol .08+ (FARS): Reduce the number of NHTSA-defined (BAC 0.08) impaired-driving related fatalities on all roads in Maryland from the five-year average (2004-2008) of 178 to 109 or fewer by December 31, 2020.

- From 2012-2016, FARS³ reported an average of 144 impaired-driving related (BAC 0.08+) fatalities in Maryland. This figure is lower than the previous 5-year period, so *Maryland is still progressing toward the 2020 target*.

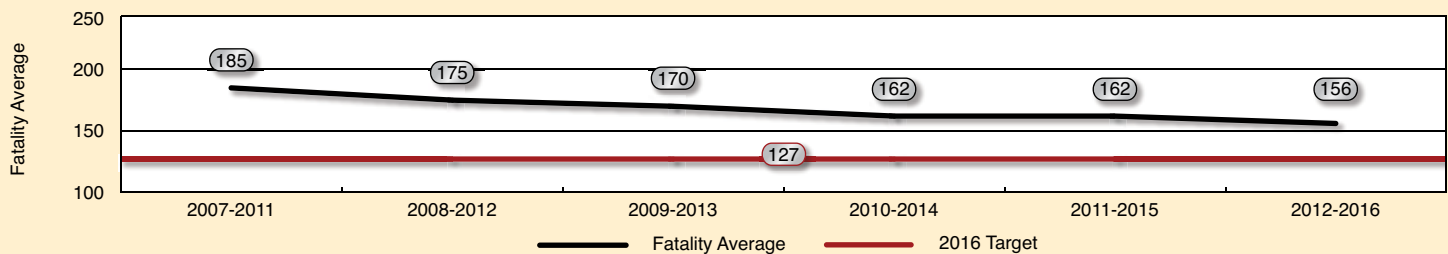
***** (State) Impaired (alcohol/drugs):** Reduce the number of State-defined (alcohol/drug) impaired-driving related fatalities on all roads in Maryland from the five-year average (2004-2008) of 210 to 127 or fewer by December 31, 2020⁴.

- From 2012-2016, there was an average of 156 impaired-driving related fatalities in Maryland. This figure is lower than the previous 5-year average and continues a downward trend, so *Maryland is progressing toward the 2020 target*.

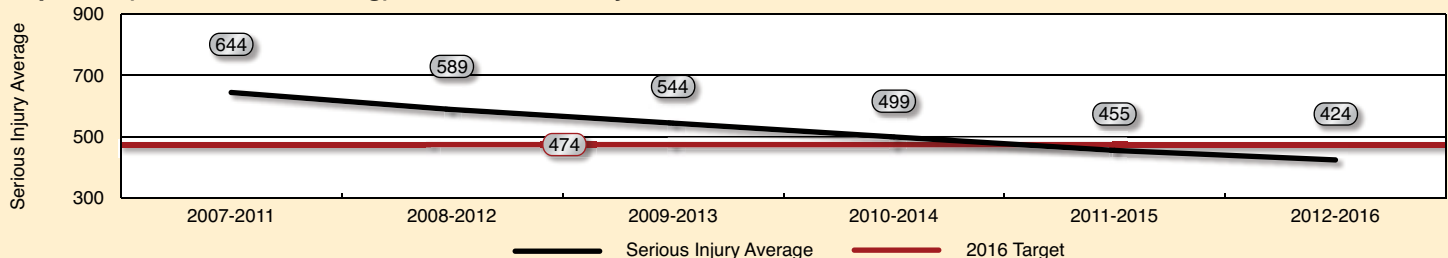
***** Serious Injury Target: Impaired (alcohol/drugs):** Reduce the number of impaired (alcohol/drug) driving related serious injuries on all roads in Maryland from the five-year average (2004-2008) of 862 to 403 or fewer by December 31, 2020.

- From 2012-2016 there was an average of 424 impaired-driving related serious injuries in Maryland. This figure is lower than the previous 5-year average, so *Maryland is progressing toward the 2020 target* and is continuing to show a steady decline.

Impaired (alcohol and/or drug) Traffic Fatalities



Impaired (alcohol and/or drug) Traffic Serious Injuries



³ NHTSA FARS ARF (preliminary)

⁴ Note: The December 31, 2020 target is the mid-year point of the 2018-2022 five-year average. All performance measure target statements will follow this format.

***State 2016 impaired data are now available

DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

UNRESTRAINED-OCCUPANT MOTOR VEHICLE FATALITIES

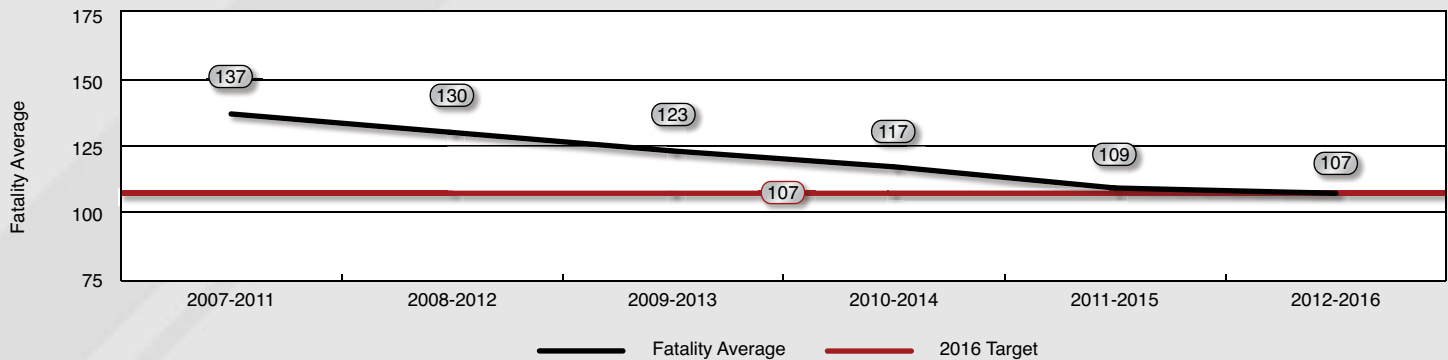
Fatality Target: Reduce the number of unrestrained-occupant motor vehicle fatalities on all roads in Maryland from the five-year average (2004-2008) of 161 to 94 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 107 unrestrained-occupant motor vehicle fatalities in Maryland. This figure is lower than the previous 5-year average and has contributed to a continuing downward trend since 2004, so *Maryland is progressing toward the 2020 target.*

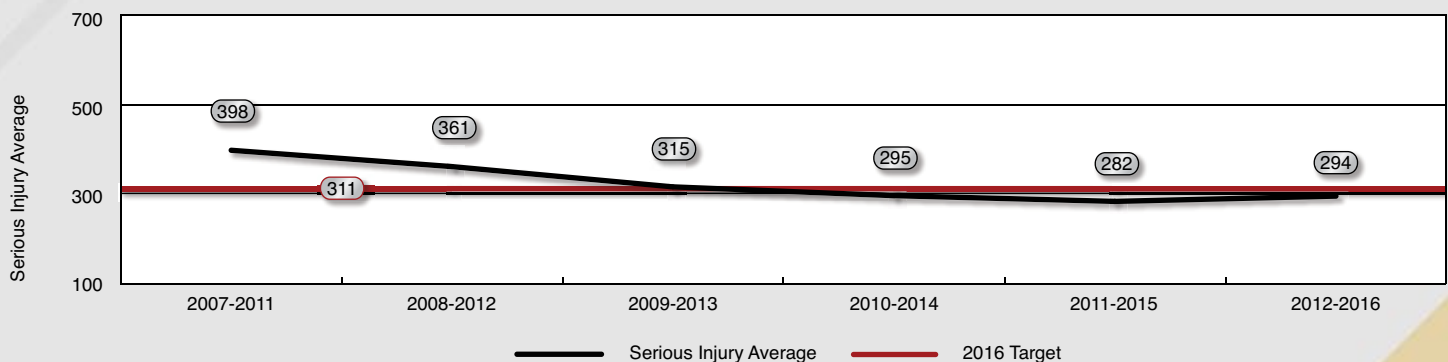
Serious Injury Target: Reduce the number of unrestrained-occupant motor vehicle serious injuries on all roads in Maryland from the five-year average (2004-2008) of 632 to 268 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 294 unrestrained-occupant motor vehicle serious injuries in Maryland. This figure is higher than the previous 5-year average, so *Maryland is not progressing toward the 2020 target.*

Unrestrained-Occupant Motor Vehicle Fatalities



Unrestrained-Occupant Motor Vehicle Serious Injuries



2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

AGGRESSIVE-DRIVING RELATED FATALITIES

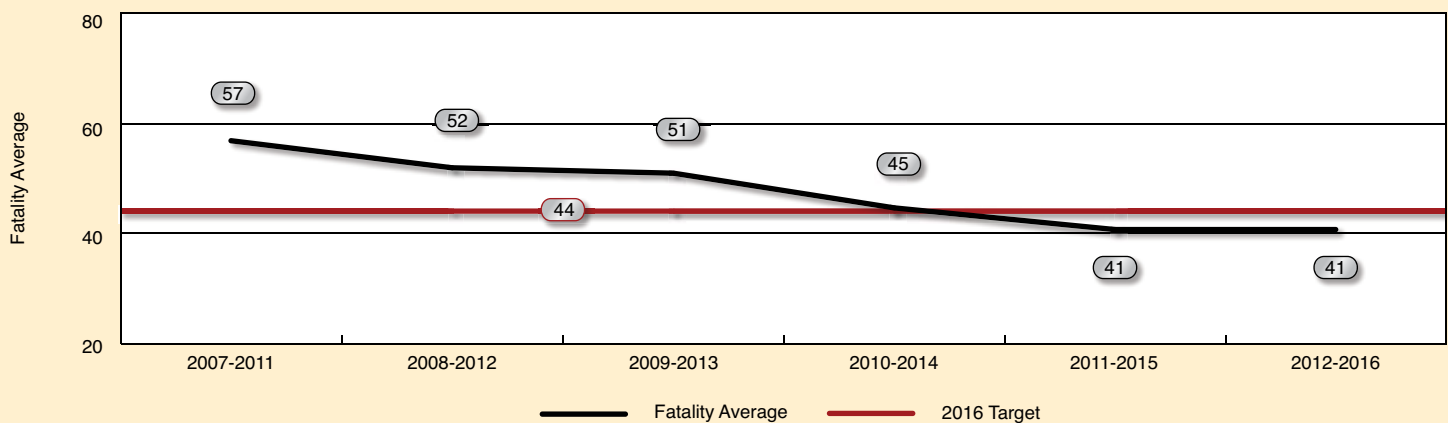
Fatality Target: Reduce the number of aggressive-driving related fatalities on all roads in Maryland from the five-year average (2004-2008) of 70 to 39 or fewer by December 31, 2020.

- From 2012-2016 there was an average of 41 aggressive-driving related fatalities in Maryland. This figure continues a decade-long decline, so *Maryland is progressing toward the 2020 target.*

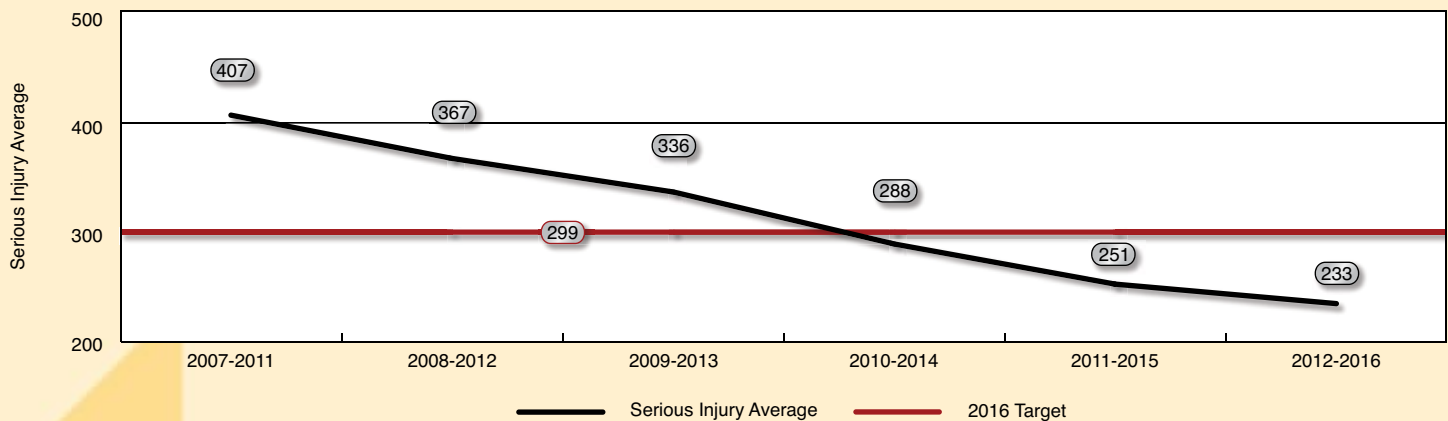
Serious Injury Target: Reduce the number of aggressive-driving related serious injuries on all roads in Maryland from the five-year average (2004-2008) of 525 to 258 or fewer by December 31, 2020.

- From 2012-2016 there was an average of 233 serious injuries resulting from aggressive driving. This continues the downward trend observed in recent years, so *Maryland is progressing toward the 2020 target.*

Aggressive-Driving Related Fatalities



Aggressive-Driving Related Serious Injuries



DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

DISTRACTED-DRIVING RELATED FATALITIES

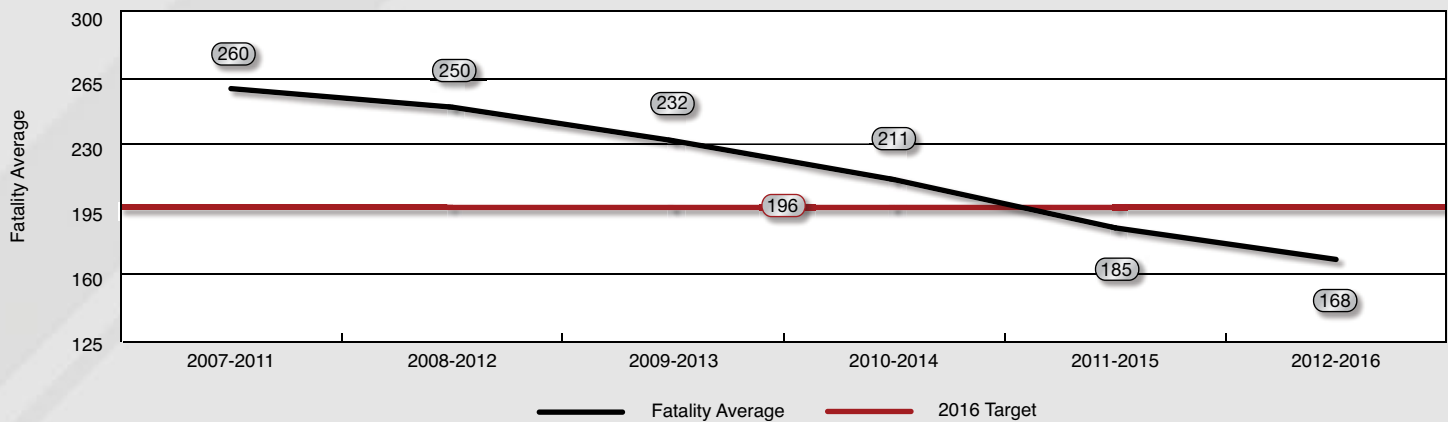
Fatality Target: Reduce the number of distracted-driving related fatalities on all roads in Maryland from the five-year average (2004-2008) of 333 to 169 or fewer by December 31, 2020.

- From 2012-2016, there were 168 distracted-driving related fatalities in Maryland. This figure is lower than the previous 5-year averages, continuing a downward trend over the past decade, so *Maryland is progressing toward the 2020 target.*

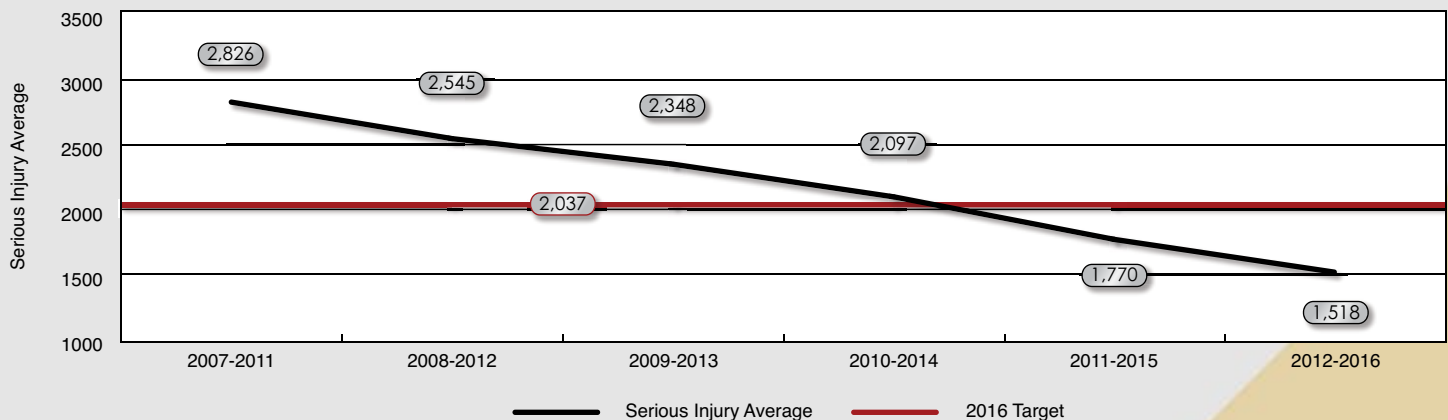
Serious Injury Target: Reduce the number of distracted-driving related serious injuries on all roads in Maryland from the five-year average (2004-2008) of 4,134 to 1,722 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 1,518 distracted-driving related serious injuries in Maryland. This figure is lower than the previous 5-year average and continues the downward trend observed in recent years, so *Maryland is progressing toward the 2020 target.*

Distracted-Driving Related Fatalities



Distracted-Driving Related Serious Injuries



2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

PEDESTRIAN (ON FOOT) FATALITIES

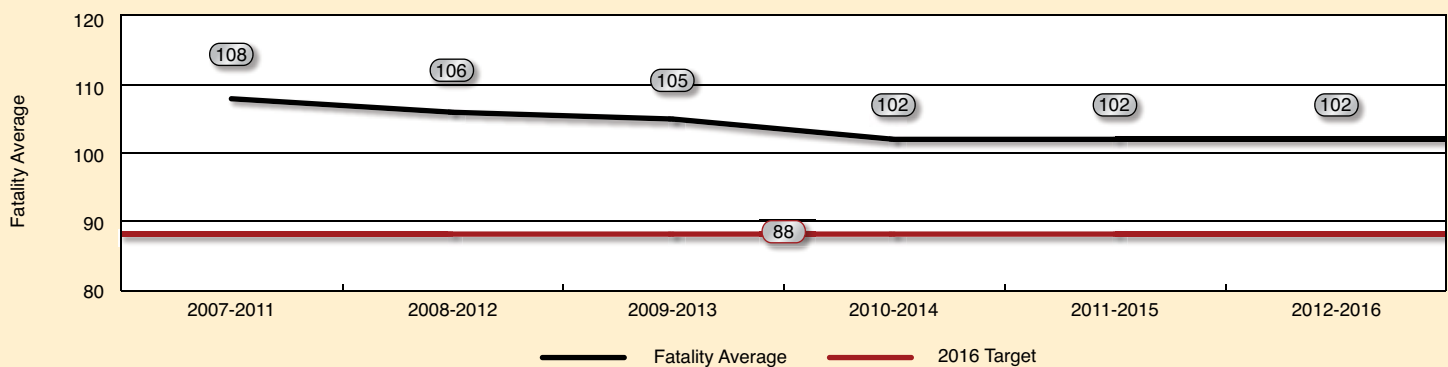
Fatality Target: Reduce the number of pedestrian (on foot) fatalities on all roads in Maryland from the five-year average (2004–2008) of 103 to 79 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 102 pedestrian (on foot) fatalities in Maryland. This figure is the same as the previous 5-year average and slightly lower than previous years. Although Maryland's pedestrian (on foot) fatalities have remained static over the past decade, so *Maryland is slowly progressing toward the 2020 target.*

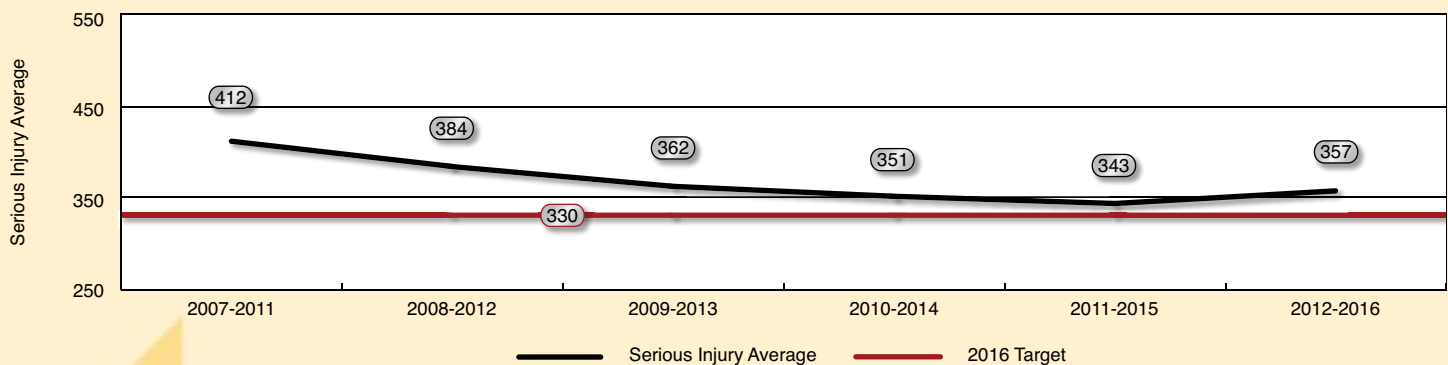
Serious Injury Target: Reduce the number of pedestrian (on foot) serious injuries on all roads in Maryland from the five-year average (2004–2008) of 492 to 292 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 357 pedestrian (on foot) serious injuries in Maryland. This figure is higher than the previous five-year average, so *Maryland is not progressing toward the 2020 target.*

Pedestrian Fatalities (On Foot)



Pedestrian Serious Injuries (On Foot)



DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

In addition to the targets set forth in the Maryland SHSP, the MHSO used the same methodology to create targets and interim performance statements for each of the following areas.

MOTORCYCLE-INVOLVED FATALITIES

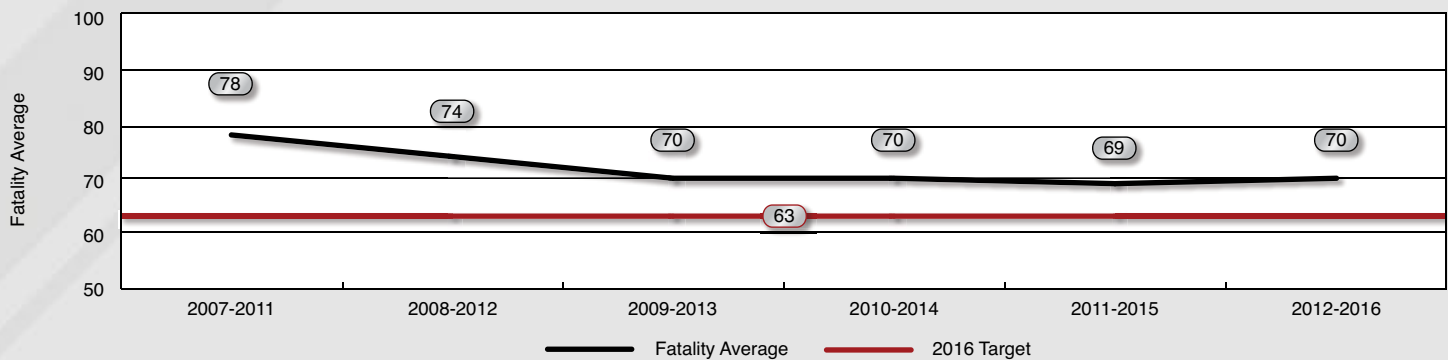
Fatality Target: Reduce the number of motorcycle-involved fatalities on all roads in Maryland from the five-year average (2004-2008) of 84 to 56 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 70 motorcycle-involved fatalities in Maryland. This figure is slightly higher than the 2011-2015 average but the State has continued to show a gradual decrease since 2004, so *Maryland is progressing toward the 2020 target.*

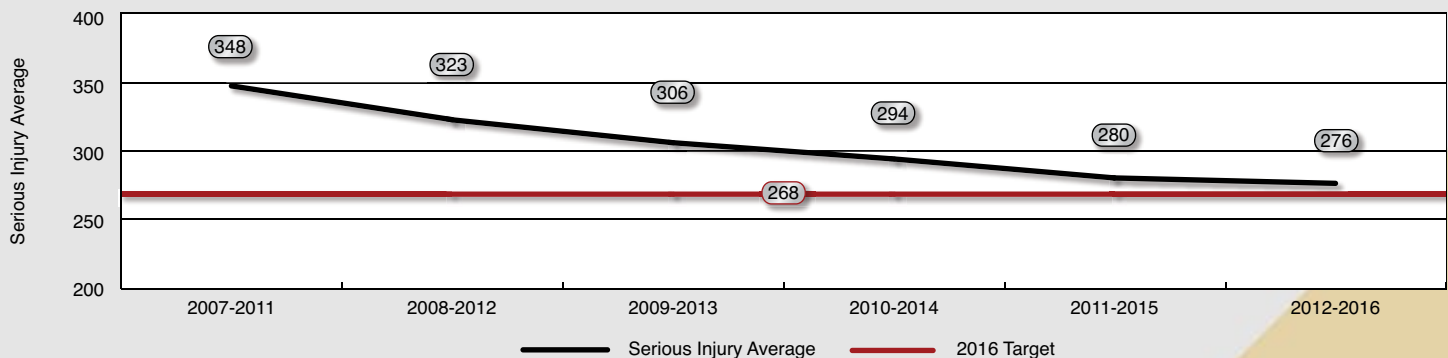
Serious Injury Target: Reduce the number of motorcycle-involved serious injuries on all roads in Maryland from the five-year average (2004-2008) of 423 to 231 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 276 motorcycle-involved serious injuries in Maryland. This figure is lower than the previous five-year average and continues an overall decline over the past several years, so *Maryland is progressing toward the 2020 target.*

Motorcycle-Involved Fatalities



Motorcycle-Involved Serious Injuries



2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

OLDER-DRIVER (65-110) INVOLVED FATALITIES

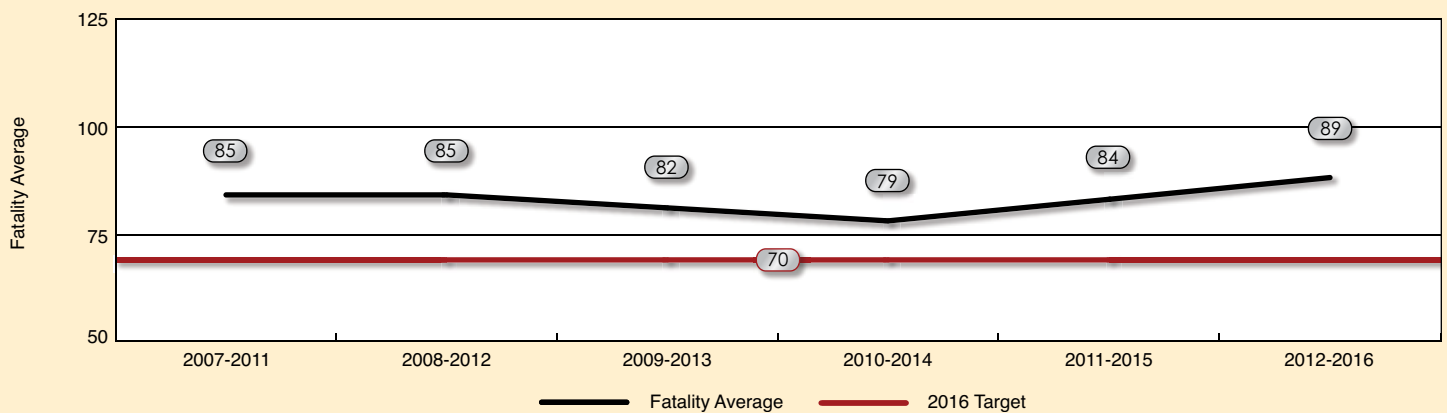
Fatality Target: Reduce the number of older-driver involved fatalities on all roads in Maryland from the five-year average (2004–2008) of 95 to 62 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 89 older-driver involved fatalities in Maryland. This figure is higher than has been observed in recent years and indicates that *Maryland is not progressing toward the 2020 target.*

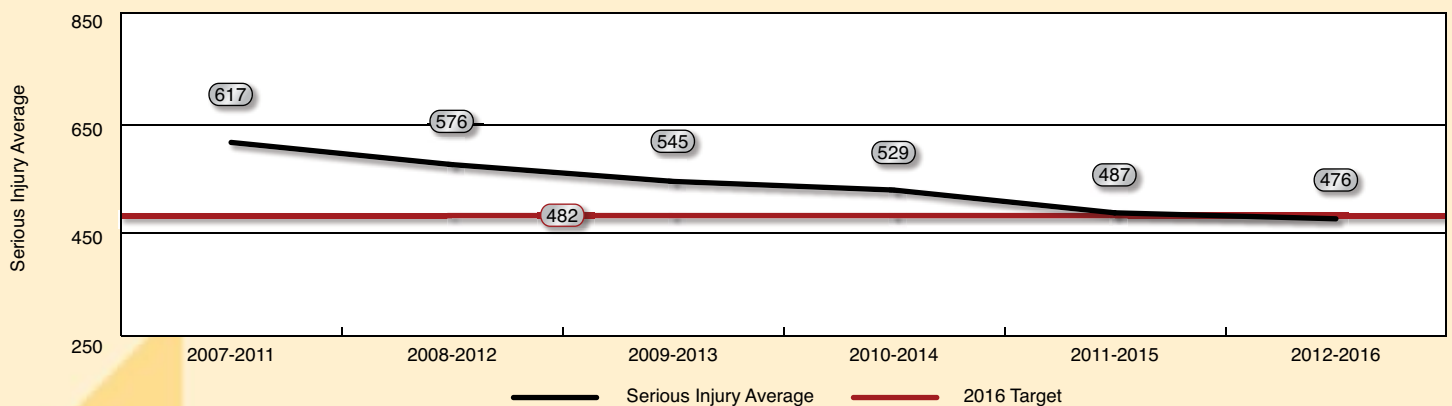
Serious Injury Target: Reduce the number of older-driver involved serious injuries on all roads in Maryland from the five-year average (2004–2008) of 781 to 417 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 476 older-driver involved serious injuries in Maryland. This figure is lower than the previous five-year average, so *Maryland is continuing its downward trend of older driver serious injuries and is progressing toward the 2020 target.*

Older-Driver Involved Fatalities



Older-Driver Involved Serious Injuries



DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

YOUNGER-DRIVER (16-20) INVOLVED FATALITIES

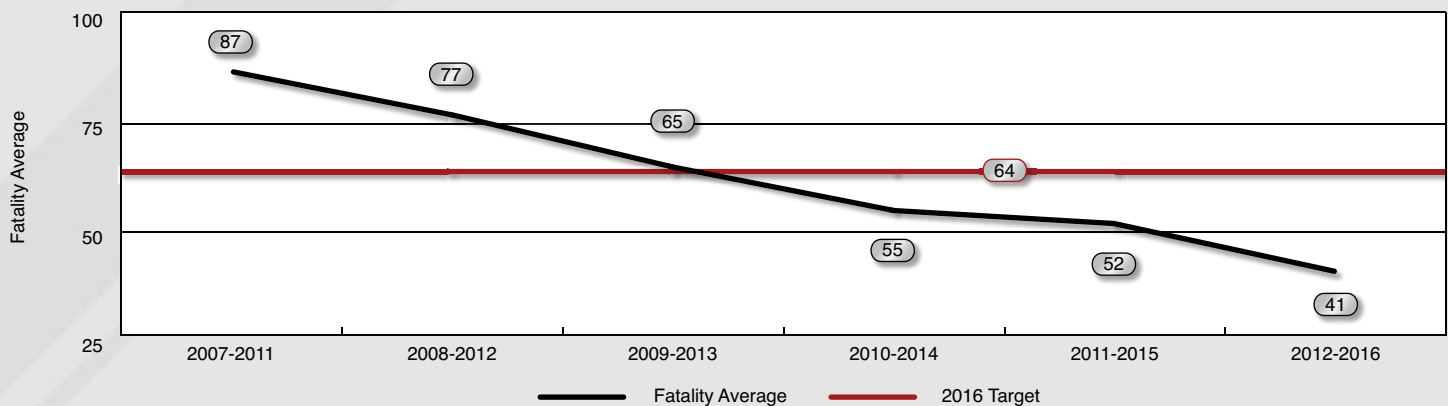
Fatality Target: Reduce the number of young-driver involved fatalities on all roads in Maryland from the five-year average (2004–2008) of 113 to 57 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 41 young-driver involved fatalities in Maryland. This figure is lower than the previous five-year average and continues to follow a downward trend over the past several years, so *Maryland is progressing toward the 2020 target.*

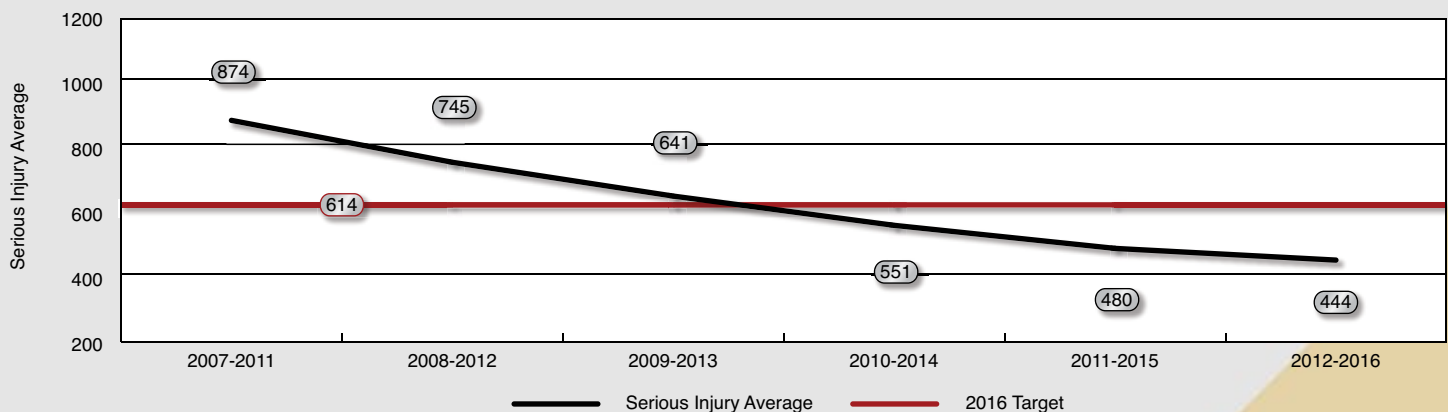
Serious Injury Target: Reduce the number of young-driver involved serious injuries on all roads in Maryland from the five-year average (2004–2008) of 1,401 to 515 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 444 young-driver involved serious injuries in Maryland. This figure is lower than the previous five-year average and continues a steady downward trend, so *Maryland is progressing toward the 2020 target.*

Young-Driver Involved Fatalities



Young-Driver Involved Serious Injuries



2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

SPEED-RELATED FATALITIES

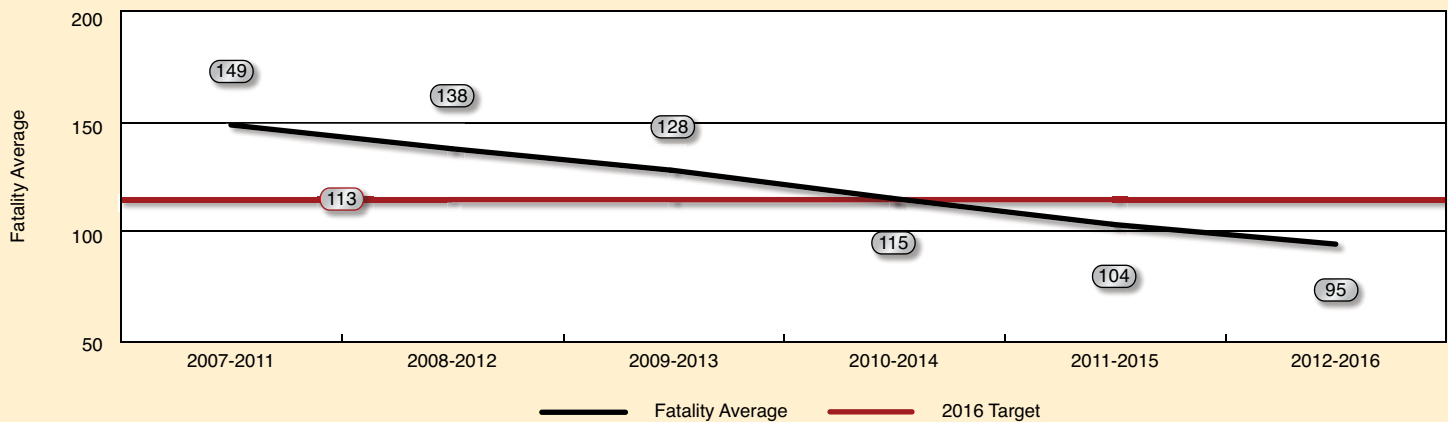
Fatality Target: Reduce the number of speed-related fatalities on all roads in Maryland from the five-year average (2004-2008) of 176 to 99 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 95 speed-related fatalities in Maryland. This figure is lower than the previous five-year average and continues a decade-long downward trend, so *Maryland is progressing toward the 2020 target*.

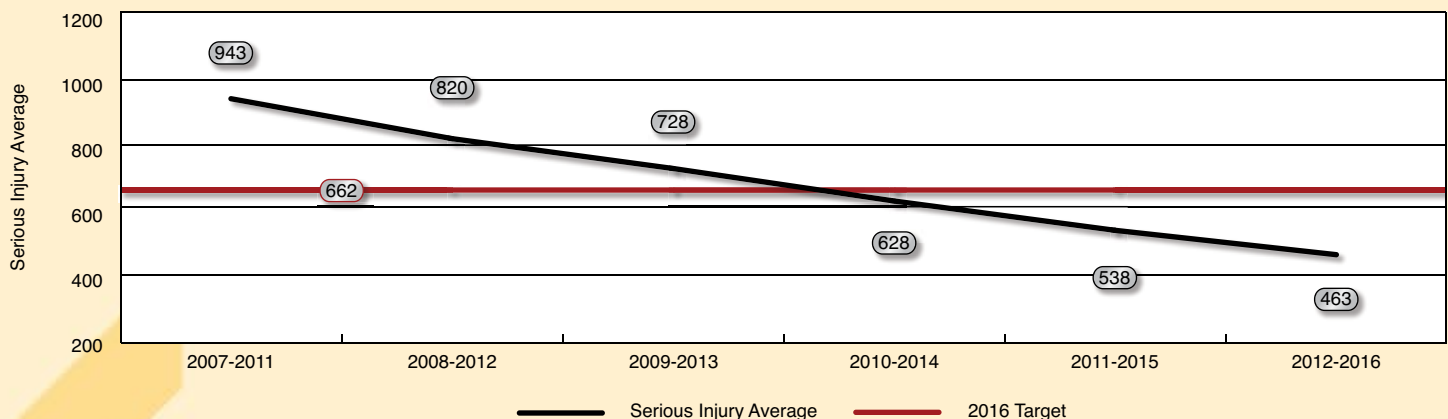
Serious Injury Target: Reduce the number of speed-related serious injuries on all roads in Maryland from the five-year average (2004-2008) of 1,340 to 564 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 463 speed-related serious injuries in Maryland. This figure is lower than the previous five-year average and continues a decade-long downward trend, so *Maryland is progressing toward the 2020 target*.

Speed-Related Traffic Fatalities



Speed-Related Traffic Serious Injuries



DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

BICYCLIST FATALITIES

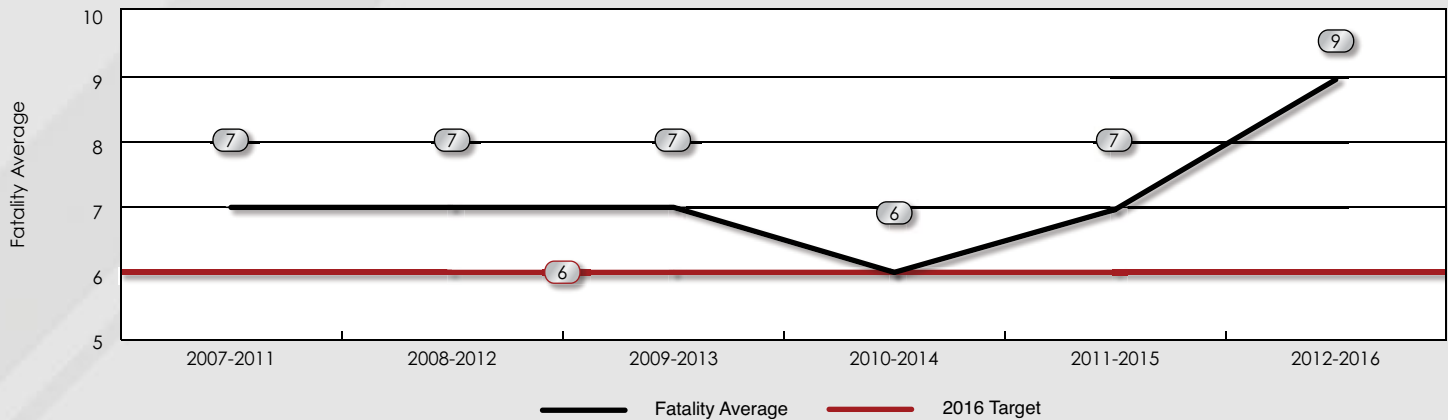
Fatality Target: Reduce the number of bicyclist fatalities on all roads in Maryland from the five-year average (2004-2008) of 8 to 6 or fewer by December 31, 2020.

- From 2012-2016, there was an average of 9 bicyclist fatalities in Maryland. This figure is higher than the previous five-year average and there has been little change in fatalities over the past decade, so *Maryland is not progressing toward the 2020 target.*

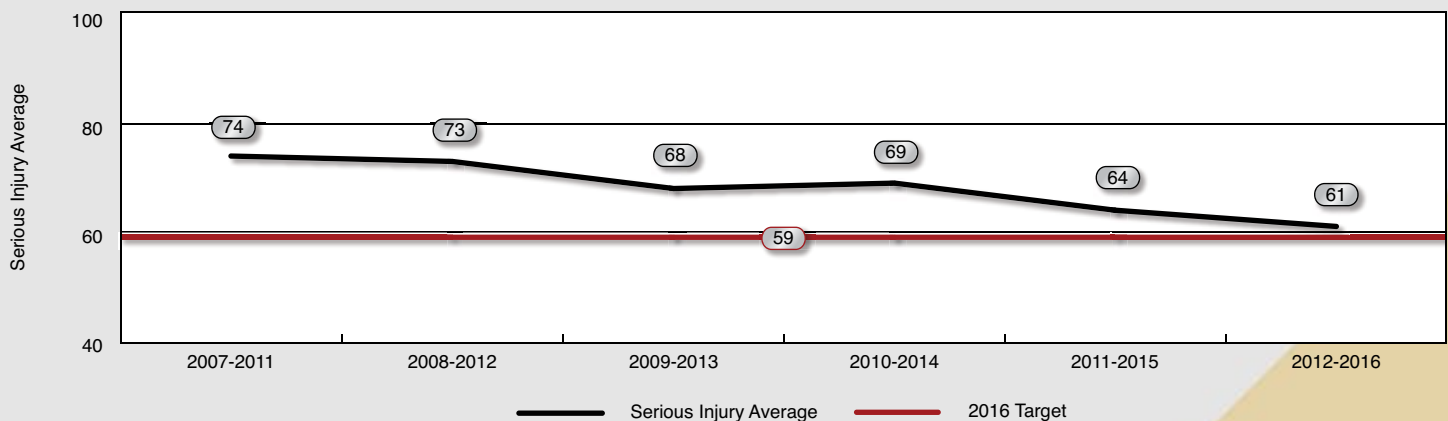
Serious Injury Target: Reduce the number of bicyclist serious injuries on all roads in Maryland from the five-year average (2004-2008) of 81 to 52 or fewer by December 31, 2020.

- From 2012-2016 there was an average of 61 bicyclist serious injuries in Maryland. This figure is lower than the previous five-year average, so *Maryland is progressing toward the 2020 target.*

Bicyclist Fatalities



Bicyclist Serious Injuries



NHTSA CORE PERFORMANCE MEASURES

To meet federal requirements as expressed in the FAST Act, the required minimum set of core performance measures are included below. The source for all fatality baseline data is NHTSA's FARS most recently available data. Please note that base year numbers and targets will NOT match the base year number and targets stated on previous pages due to differences in data definitions between the NHTSA FARS system and the State crash data system.

All targets below are set using a five-year average and the exponential trend method described earlier. Additional sources include: serious injury crash data derived from the MDOT SHA, based on reports submitted and processed by the Maryland State Police Central Records Division (MSP CRD) and through the ACRS; seat belt use rate obtained from the annual Maryland Observational Surveys of Safety Belt Use; and seat belt citations, DUI arrests, and speeding citations obtained through MHSO's grant management reporting system.

As with the SHSP, the end-year targets (by December 31, 2020) and single year targets are derived from the midpoint of the 5-year average for the years 2018–2022.

Note: FARS 2016 data are preliminary and will change when Final FARS is released; therefore, all targets are subject to change.

Standardized Performance and Survey Measures
• Reduce the five-year average number of fatalities on all roads in Maryland from 623 in 2004–2008 (NHTSA FARS ARF) to 397 or fewer by December 31, 2020.
• Reduce the five-year average number of fatalities on rural roads in Maryland from 251 in 2004–2008 to 97 or fewer by December 31, 2020.
• Reduce the five-year average number of fatalities on urban roads in Maryland from 371 in 2004–2008 to 282 or fewer by December 31, 2020.
• Reduce the five-year average fatality rate per VMT on all roads in Maryland from 1.11 in 2004–2008 to 0.71 or lower by December 31, 2020.
• Reduce the five-year average fatality rate per VMT on rural roads in Maryland from 1.76 in 2004–2008 to 0.94 or lower by December 31, 2020.
• Reduce the five-year average fatality rate per VMT on urban roads in Maryland from 0.89 in 2004–2008 to 0.55 or lower by December 31, 2020.
• Reduce the five-year average number of serious injuries on all roads in Maryland from 6,171 in 2004–2008 to 2,857 or fewer by December 31, 2020.
• Reduce the five-year average number of unrestrained passenger vehicle occupant fatalities (all seat positions) on all roads in Maryland from 167 in 2004–2008 to 73 or fewer by December 31, 2020.
• Reduce the five-year average number of alcohol-related fatalities (BAC 0.08+) on all roads in Maryland from 178 in 2004–2008 to 125 or fewer by December 31, 2020.

**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**



Standardized Performance and Survey Measures

- Reduce the five-year average number of speeding-related fatalities on all roads in Maryland from 222 in 2004–2008 to 96 or fewer by December 31, 2020.
- Reduce the five-year average number of motorcyclist fatalities on all roads in Maryland from 85 in 2004–2008 to 60 or fewer by December 31, 2020.
- Reduce the five-year average number of unhelmeted motorcyclist fatalities on all roads in Maryland from 11 in 2004–2008 to 6 or fewer by December 31, 2020.
- Reduce the five-year average number of drivers aged 20 or under involved in fatal crashes on all roads in Maryland from 103 in 2004–2008 to 22 or fewer by December 31, 2020.
- Reduce the five-year average number of pedestrian fatalities on all roads in Maryland from 105 in 2004–2008 to 96 or fewer by December 31, 2020.
- Reduce the five-year average number of bicyclist and other cyclist fatalities on all roads in Maryland from 8 in 2004–2008 to 7 or fewer by December 31, 2020.
- To increase statewide observed belt use rate of front seat outboard occupants in passenger vehicles and light trucks from the 2012 calendar base year of 91.1 percent to 96.2 percent by December 31, 2020.
- To report the number of seat belt citations issued during grant-funded enforcement activities.
- To report the number of impaired driving arrests made during grant-funded enforcement activities.
- To report the number of speeding citations issued during grant-funded enforcement activities.

2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

Core Outcome Measures		Year					
		2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016
Traffic Fatalities	Total	547	526	501	480	485	489
	Rural	204	191	180	170	158	145
	Urban	341	332	317	307	320	337
Fatalities Per 100 Million Vehicle Miles Traveled	Total	0.98	0.94	0.89	0.85	0.86	N/A
	Rural	1.44	1.35	1.34	1.34	1.33	N/A
	Urban	0.82	0.80	0.74	0.70	0.72	N/A
Unrestrained Passenger Vehicle Occupant Fatalities (all seat positions)		137	130	123	117	109	104
Alcohol-Impaired Driving Fatalities (BAC=.08+)		161	158	156	149	150	144
Speeding-Related Fatalities		180	177	168	158	150	147
Motorcyclist Fatalities		83	79	73	73	72	72
Unhelmeted Motorcyclist Fatalities		11	10	9	9	8	8
Drivers Aged 20 or Under Involved in Fatal Crashes		81	73	62	51	48	45
Pedestrian Fatalities		110	106	105	102	101	101
Bicyclist and Other Cyclist Fatalities		7	7	7	6	6	9

Core Outcome Measure (State Data)	Year						
	Actual						Target
	2007-2011	2008-2012	2009-2013	2010-2014	2011-2015	2012-2016	2016-2020
Serious Injuries	4,436	4,020	3,702	3,436	3,147	3,017	3,088

Core Behavior Measure (State Data)	Year						
	Actual				Target		
	2014	2015	2016	2017	2018	2019	2020
Observed seat belt use for passenger vehicles, front seat outboard occupants (Survey)	92.1	92.9	90.8	92.1	94.8	95.5	96.2

The proposed seat belt use rate targets estimate a reduction in the number of observed unbelted motor vehicle occupants by at least 25 in each of the observation counties for each successive year. Targets were set based on the 92.1% belt use rate in 2014. Maryland did not achieve its target of 94.1 for 2017.

**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**

Activity Measures (State Data: Grant-funded Only)*	FFY 2017
Number of seat belt citations issued during grant-funded enforcement activities	2,580
Number of impaired driving arrests made during grant-funded enforcement activities	1,097
Number of speeding citations issued during grant-funded enforcement activities	18,529

* Targets are not created for activity measures.

MARYLAND SINGLE YEAR TRAFFIC SAFETY TARGETS						
Core Outcome Measures		Year				
		2016	2017	2018	2019	2020
Traffic Fatalities	Total	448	435	422	410	398
	Rural	128	119	111	104	97
	Urban	303	298	292	287	282
Fatalities Per 100 Million Vehicle Miles Traveled	Total	0.80	0.78	0.76	0.73	0.71
	Rural	1.11	1.07	1.02	0.98	0.94
	Urban	0.63	0.61	0.59	0.57	0.55
Unrestrained Passenger Vehicle Occupant Fatalities (all seat positions)		92	87	82	77	73
Alcohol-Impaired Driving Fatalities (BAC=.08+)		137	134	131	128	125
Speeding-Related Fatalities		119	113	107	102	96
Motorcyclist Fatalities		67	65	64	62	60
Unhelmeted Motorcyclist Fatalities		7	7	7	6	6
Drivers Aged 20 or Under Involved in Fatal Crashes		35	31	28	25	22
Pedestrian Fatalities		100	99	98	97	96
Bicyclist and Other Cyclist Fatalities		7	7	7	7	7
Serious Injuries		3,339	3,211	3,088	2,970	2,857

Note: The performance targets above are rounded to the nearest whole number or hundredths place. Federally-required performance targets with appropriate decimal places are provided on pages 17-19 of this document.

PROGRAM AREAS IMPAIRED DRIVING

Roughly a third of annual Maryland traffic fatalities involve a driver impaired by alcohol and/or drugs. Preventing impaired driving remains one of the largest area of concentration for the MHSO. Between 2013–2015, an average of 154 people lost their lives and 340 people were seriously injured annually in impaired driver involved crashes on Maryland roadways. In 2016, 148 people lost their lives and 421 people were seriously injured in impaired-driver involved crashes.

HVE campaigns form the core of Maryland’s approach to preventing impaired driving. The primary focal point is the State’s *Checkpoint Strikeforce* campaign, coordinated from August through December by the Washington Regional Alcohol Program (WRAP) and the MHSO’s Impaired Driving Prevention Program Manager. The campaign features periods of enforcement augmented by media on a variety of outlets including television, radio, outdoor and social and digital platforms. Maryland has continued to emphasize that everyone needs to “Make a plan for a safe and sober ride” and advocates for a wide range of alternatives to driving impaired, such as rideshares, cabs, designated drivers, and public transportation. Additional outreach was conducted at bars and liquor stores, as well as craft beer and wine festivals. Media support for impaired driving campaigns throughout FFY 2017 totaled more than \$400,000, and the total number of media impressions for the campaign exceeded 10 million.

Each year, the MHSO and WRAP hold Maryland Remembers, a ceremony which memorializes the victims of impaired driving. More than 150 people were on-hand for the 13th annual event held in December 2016, including victim families, friends, advocates, law enforcement, traffic safety officials, and dignitaries. The event featured remarks by Rich Leotta, the father of

a Montgomery County Police Officer who was struck and killed by a drunk driver in December 2015. Mr. Leotta was instrumental in the passing of “Noah’s Law,” which augmented Maryland’s ignition interlock program. Through its first year, Noah’s Law has saved lives in Maryland by having more people enroll in the Ignition Interlock program. Since Noah’s Law took effect, participation in Ignition Interlock increased in Maryland by 10 percent, and the number of first-time Ignition Interlock participants increased by more than 25 percent. Last year alone, ignition interlock devices prevented individuals from starting their vehicles more than 2,000 times when their alcohol concentration was above the legal limit. Additional speakers included Lt. Governor Boyd K. Rutherford, Transportation Secretary Pete K. Rahn, and MSP Superintendent Colonel William Pallozzi.

In June 2017, the MHSO and the University of Maryland Institute of Advanced Law Enforcement Studies hosted its annual DUI Institute for Maryland police officers at the University of Maryland, College Park (UMD). Now in its 12th year, the Institute was developed jointly by the UMD School of Public Health’s Department of Behavioral and Community Health, the MHSO, police officers, and national experts on alcohol-impaired driving. The 40-hour, in-service program exposes officers to information on the effectiveness of impaired driving countermeasures (ignition interlocks, DUI courts, sobriety checkpoints, etc.), police traffic management, and the physiology of alcohol and its abuse/addiction. More than 20 officers graduated in the 2017 class.

In December 2016, 14 Washington metropolitan area police officers were recognized by WRAP for excellence in impaired driving enforcement. Four Maryland police officers received awards as part of this regional ceremony.

**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**



Graduates of the 2017 Maryland DUI Institute.

WRAP coordinates an MHSO supported program named SoberRide, which provides free, sober rides (up to a \$15 value) to potential drunk drivers in the Washington D.C. metropolitan area. The service is provided around five holidays – St. Patrick's Day, Cinco de Mayo, Independence Day, Halloween, and the winter holidays. These days are typically accompanied by increases in impaired driving related crashes. Throughout FFY 2017, rides were provided to more than 2,700 people, a significant increase from FFY 2016. In March 2017, WRAP announced that it had secured a new partnership with Lyft, and users of the SoberRide program now are able to use the Lyft app to request rides, greatly enhancing the visibility of the program and its ease of use by customers.

As part of local outreach, the MHSO funds presentations known as Alcohol Awareness for Students at Maryland high schools. Given by staff from WRAP, these presentations provide impaired driving education to students and raise their awareness of alcohol-related impairment issues. More than 4,000 Maryland students heard these presentations during the grant year.

DUI Courts in Anne Arundel, Howard, Harford, and St. Mary's counties received MHSO funding support. In these DUI courts, persons with three or more DUI convictions are offered an opportunity to enter a judicially-supervised program to treat the actual substance abuse problem and help the individual live a life without alcohol. Combined, these programs serve roughly 100 individuals throughout the year. In FFY 2017, 46 people graduated from the courts. Participants in support groups worked through a 12-step program and completed the MADD impact panels. Participants were monitored for alcohol use through transdermal testing (SCRAM) as they attended weekly case management meetings and received individual treatment for their addictions. Maryland's DUI courts have shown an extremely low level of recidivism among participants.

For the past five years, Maryland has funded a Traffic Safety Resource Prosecutor (TSRP) to provide training



2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

and education to law enforcement and prosecutors in the State. Based on a curriculum similar to the aforementioned DUI Institute for law enforcement, this advanced training is provided to prosecutors from across the State. Twenty-three prosecutors attended the three-day training which covered:

- MHSO programs
- Courtroom testimony
- Standardized Field Sobriety Testing
- Intoximeter operation
- DUI checkpoints
- Maryland's Drug Recognition Expert (DRE) program
- Common defenses in a DUI trial

The TSRP monthly blog was distributed to more than 700 stakeholders. Maryland's TSRP provided training throughout the State with a complete list of trainings in FFY 2017 and their number of participants below:

Baltimore County Police – Marijuana and the Law	57
Department of Natural Resources – Marijuana Search & Seizure	236
DUI Conference for Police	155
DUI Institute for Police	28
DUI Institute for Prosecutors	23
Edmonson Police – Marijuana Search & Seizure	12
Frederick County Sheriff's Department – Marijuana Search & Seizure	113
Howard County DUI Training	21
Justice Reinvestment Act Driving Suspension	90
LETEP Training	20
MSAA Young Lawyers Trial Advocacy	35
Maryland Police Training on Search and Seizure	19
Montgomery County DUI Training	18
Prince George's County Young Prosecutors DUI Training	15
Prosecuting Auto Manslaughter Cases for Police and Prosecutors	95
Total	937

The Maryland DRE program is focused on training police officers to better identify drug impaired drivers. There are currently 38 DRE instructors in the State. Thirty-seven agencies have a total of 156 DREs in the Maryland program. Maryland DREs conducted a total of 676 evaluations during this fiscal year. During those evaluations, 302 blood samples were collected from suspected impaired drivers. A new Maryland DRE web site was created and launched. The new site features a modernized interface as well as a new system for data input from DREs in the field and data collection and reporting.

The Maryland DRE program is jointly coordinated by the MHSO and MSP and includes a fully funded DRE coordinator who focuses on Advanced Roadside Impaired Driving Enforcement (ARIDE) training. NHTSA created ARIDE to address the gaps in training between the Standardized Field Sobriety Testing (SFST) and the DRE program. Ten ARIDE classes were conducted during FFY 2017, training a total of 137 law enforcement officers.



MDOT Deputy Secretary Jim Ports speaks about the dangers of drunk and drugged driving at a press event.

Maryland continued to fund a dedicated DUI team known as SPIDRE, or the State Police Impaired Driving Effort. This team is comprised of seven troopers dedicated solely to DUI enforcement in counties where impaired

DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

driving is known to be a significant concern. These counties included Anne Arundel, Baltimore, Montgomery, and Prince George's in FFY 2017. Since May 2013, troopers assigned to the SPIDRE team have made a total of 7,360 traffic stops resulting in more than 2,440 impaired driving arrests and 114 criminal arrests. A press event held in late June 2017 kicked off the fifth year of the SPIDRE team and promoted the HVE efforts taking place during Independence Day.



A breath testing device used in Maryland's ignition interlock program.

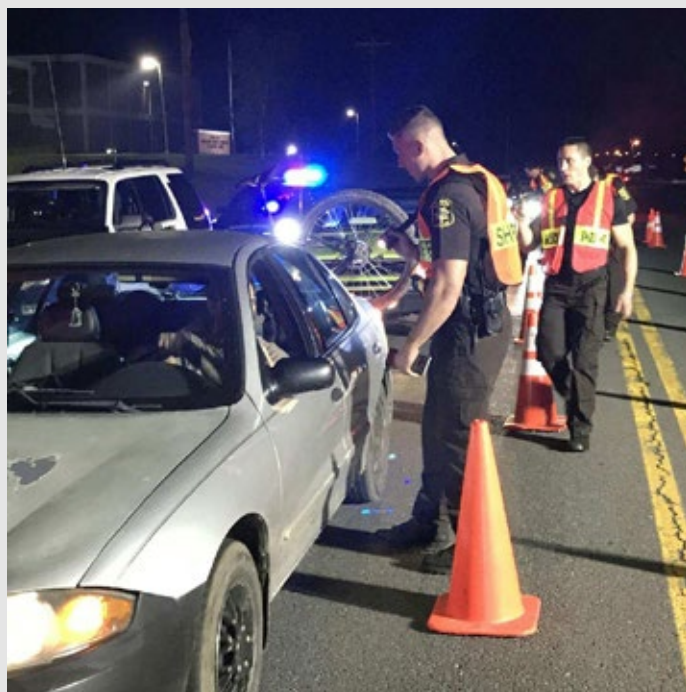
funding to test approximately 230 blood samples collected by the Office of the Chief Medical Examiner. Eighty-four (37 percent) tested positive for at least one drug included in the panel. Results will be linked with additional OCME and crash data as part of the final report which will also be compiled for submission to a journal.

This information will help inform policy makers on the prevalence of marijuana use among motor vehicle drivers in Maryland and will serve as a baseline for further analysis.

As part of Maryland's standardized performance and survey measures, the total number of DUI arrests that were made during grant funded enforcement activities was 1,097.

Preventing impaired driving remains one of the largest areas of concentration for the MHSO.

To better understand the extent of drug-impaired driving, Maryland began a project to test blood samples from persons who were killed as the result of a motor vehicle crash. With the recent passage of laws legalizing the use of marijuana in other states, more information is needed on the number of people who have used marijuana prior to their involvement in a fatal crash. The MHSO provided



Sobriety checkpoint in Allegany County.

PROGRAM AREAS OCCUPANT PROTECTION

Seat belt use continues to be a central emphasis point for Maryland's statewide safety messaging. NHTSA studies have determined that as many as 50 percent of fatally injured, unbelted occupants would have survived had they been wearing their seat belt. Between 2013–2015, an average of 93 people who were unrestrained lost their lives and another 263 people were seriously injured annually in crashes on Maryland roadways. In 2016, 118 people who were unrestrained lost their lives and another 336 people were seriously injured in crashes on Maryland roadways.

Media, outreach, enforcement, and the enhancement/availability of data for law enforcement and other partners form a comprehensive approach to reducing the number of crashes involving unbelted drivers and passengers.



In 2017, Maryland increased its seat belt use rate from 90.8 percent to 92.1 percent. The 2017 seat belt survey included data collected on drivers and front-seat passengers from 46,979 vehicles at 130 selected sites in 13 jurisdictions of the State. Even with this increase, there still is much work to do, especially with enforcement of seat belt laws declining in recent years. The survey showed a drop in seat belt use on local/rural roadways – 85.1 percent use in 2017, down from 86.1 percent in 2016. In addition, only 84 percent

of backseat occupants in cars, SUVs and pick-up trucks buckled up in 2017. Although Maryland has a relatively high observed seat belt use rate, the percentage of unbelted occupant fatalities is a grossly over represented percentage that likely involves the riskiest driver.

All MHSO's safety programs included seat belt messaging in 2017.

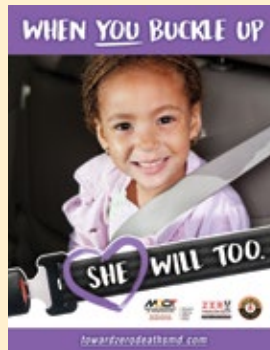
To encourage motorists to buckle up, every seat, every time, Maryland participated in the *Click It or Ticket* campaigns for November 2016 and May 2017, providing approximately \$350,000 in media for cable television, radio, social/digital media, billboards, and gas pump toppers. This year's media campaign produced more than 23,462,133 impressions. The MHSO and its partners distributed more than 40,000 pieces of educational materials and posters, as well as digital tool kits, to key local groups throughout the State.

Earned media bolstered Maryland's efforts to increase seat belt use. On May 23, MDOT Deputy Secretary Jim Ports spoke to numerous media outlets about the criticality of buckling up and *Click It or Ticket* enforcement at a joint press event with AAA, the Washington Regional Alcohol Program, and other partners. Seat belt messaging is included in all of MHSO's safety program messaging as seat belts remain the best defense against an impaired or aggressive driver.

DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.



2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT



During May's national *Click It or Ticket (CIOT)*, nearly 50 law enforcement agencies teamed up to provide increased seat belt enforcement and to send a "zero tolerance" message to the public during NHTSA's annual Border to Border enforcement. Together, police issued 366 seat belt citations and more than 500 other citations during the May 22 initiative.



Border to Border Seat belt checkpoint

The total number of seat belt citations that law enforcement issued during FFY17 grant-funded enforcement activities was 2,580.

In FFY 2017, Maryland worked with the Chesapeake Charities to begin the construction of a rollover simulator that will be used in future seat belt outreach activities. The simulator features an entire body of a pickup truck mounted on a trailer. The truck body spins along the length of the vehicle, simulating the motion of a rollover. When dummies are placed inside the vehicle, the spinning motion gives a very clear demonstration of the effect of a rollover on unbelted vehicle occupants. The project is expected to be completed in FFY 2018 and used at a variety of public education events.

CHILD PASSENGER SAFETY (CPS) – KISS & MIEMSS

The MHSO funded several CPS initiatives throughout the State, including projects with Maryland Kids in Safety Seats (KISS) and the Maryland Institute for Emergency Medical Services Systems (MIEMSS).

KISS provided more than 26,000 pieces of CPS educational materials to caregivers; 1,751 messages using an 800 Helpline; approximately 500 dedicated emails; a dedicated website; presentations and interactive displays at various health/safety fairs; and car seat inspection events. Additional FFY 2017 highlights from KISS included:

- Provided or assisted with training 100 CPS technicians to join Maryland's 500 already certified technicians.
- Distributed 511 car seats via a low-cost purchase program and a short-term special needs loaner program to families statewide.

DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

- Set up or assisted with 106 car seat checkups, reaching 1,898 families with car seat education.
- Guided 258 technician volunteers, who contributed 894.5 hours to the State program.

The State's CPS misuse average was 83.8 percent in FFY 2017. To help support rural locations, KISS staff began a Southern Maryland Team rotation among Calvert, Charles, and St. Mary's counties, and an Eastern Shore Team rotation among Talbot, Caroline, and Wicomico counties, increasing the number of checkup event sites by six counties.

The National Safety Council (NSC) selected Maryland and KISS to participate in a Digital Car Seat Inspection Form Pilot Study. Staff is investigating what needs to be done to participate in the Pilot Study.



MIEMSS' CPS & OP Healthcare Project conducted various activities to reduce injuries and deaths due to vehicle crashes by promoting proper use of car seats, seat belt use among older kids and adults, and other occupant protection measures among EMS and healthcare providers. MIEMSS staff provided education to healthcare providers and EMS on CPS and OP so they in turn can educate their patients. FFY 2017 highlights included:

- Provided 13 trainings to five hospitals (62 people attended).
- Helped with neonatal re-certification site visits at seven hospitals, meeting with key maternal and child health administrators to discuss CPS policies and services.
- Distributed nearly 24,000 CPS materials to 186 agencies (about 25% to hospitals and 25% to EMS), including about 500 posters and about 20 car seats, boosters, and dolls.
- Created the CPS Rapid Educational Response program and materials (logo, press releases, classroom activities, social media messages, and handouts), which MIEMSS distributed to 12 agencies across the State.
- Developed two webinars: one on pediatric biomechanics for CPS (47 participants), and one on technology for CPS (45 pre-registered participants).
- Sponsored Dr. Alisa Baer for pediatric Grand Rounds at the Johns Hopkins Hospital (more than 100 attendees) and for the Winterfest EMS conference (about 75 attendees). MIEMSS received excellent feedback on Dr. Baer's presentations about current CPS research, best practices, and anticipatory guidance for clinicians.

In addition, MIEMSS' loaned its new heatstroke-prevention outdoor displays – obtained through the Maryland State Firemen's Association Prevention Committee – to hospitals and EMS. The displays reached more than 4,500 participants at 17 events in FFY 2017. MIEMSS created several materials to accompany the displays, including car magnet signs, English and Spanish posters, handouts, and two different stand-up banners.

In Memory of Emilie Crown (1952-2017)



After more than 20 years as an emergency nurse at Montgomery General Hospital and Shady Grove Hospital, Emilie became program manager of Montgomery County's car seat program and co-coordinator for Safe Kids Montgomery County. Keeping children safe was her lifelong passion. An unwavering and effective advocate for child passenger safety, she received numerous awards for her work. Emilie is missed greatly by the highway safety and injury prevention community.

PROGRAM AREAS AGGRESSIVE DRIVING

Between 2013–2015 an average of 36 people lost their lives and 162 people were seriously injured annually in aggressive-driver involved crashes on Maryland roadways. In 2016, 41 people lost their lives and 199 people were seriously injured in these crashes on Maryland roadways.

Additionally, between 2013–2015, an average of 91 people lost their lives and 330 people were seriously injured annually in speeding involved crashes on Maryland roadways. In 2016, 72 people lost their lives and 395 people were seriously injured in speeding involved crashes on Maryland roadways.

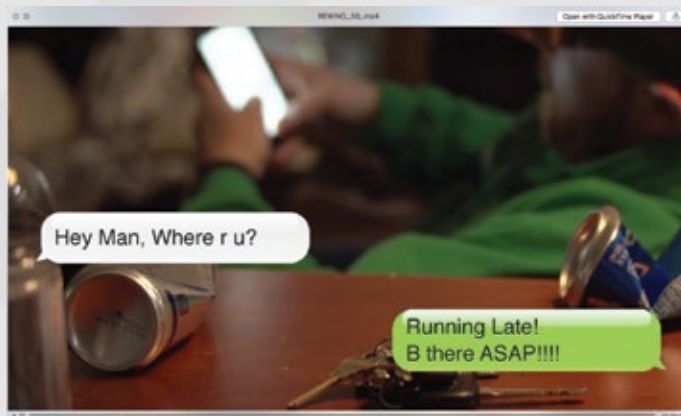
For years, Maryland's aggressive driving campaign was called Smooth Operator, which began as a regional campaign with agencies from Maryland, Virginia, Pennsylvania, and the District of Columbia participating in enforcement waves at specific times of the year. Maryland and the District of Columbia continued the campaigns; however, at the completion of the 2016 campaign, it was determined that aggressive driving problems in D.C. were different from those in Maryland and a new program was initiated.

The ADAPT campaign encourages drivers to avoid aggressive driving by modifying their behavior.

During the past five years, nearly 5,900 aggressive driving crashes have occurred annually in Maryland. Aggressive driving behaviors, specifically excessive speed, tailgating, and running red lights or stop signs, constitute some of the leading causes of crashes on Maryland roadways. The MHSO worked with its media contractor to create an entirely new campaign targeting change to these three behaviors. The campaign, known as ADAPT, is short for **Aggressive Drivers Are Public Threats (ADAPT)** and it encourages drivers to avoid aggressive driving by taking



**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**



Above: Video stills from ADAPT spots.

steps to ADAPT their behavior. Law enforcement partners continued to actively enforce Maryland's aggressive driving laws during HVE waves throughout the year. These three periods (March 3-12, May 12-21, and July 21-30), included statewide and social media content to make Maryland drivers aware of law enforcement's efforts and to educate the public on the dangers of aggressive driving.

Two video spots demonstrated aggressive driving behaviors along with ways to ADAPT behaviors to drive safely and follow Maryland law. The spots ran on cable stations throughout the final wave of the campaign. ADAPT messaging also appeared on billboards and gas pump toppers during the campaign.

In August 2017 at the first ADAPT Aggressive Driving Prevention Awards ceremony, approximately 150 officers and deputies from throughout the State were recognized for their efforts to combat aggressive driving. Colonel Jerry Jones, Maryland Transportation Authority Police Chief and Chairman of the MD Chiefs of Police Association's Traffic Safety Committee, recognized law enforcement's efforts to combat aggressive driving, thanked law enforcement partners for their service and encouraged them to continue their efforts. NHTSA's Regional Administrator Dr. Elizabeth Baker and MDOT MVA Administrator Christine Nizer also recognized the efforts of law enforcement during the ADAPT waves.

PROGRAM AREAS DISTRACTED DRIVING

To combat Distracted Driving throughout the State, MHSO uses focused outreach efforts and enforcement. Between 2013–2015, an average of 147 people lost their lives and 1,302 people were seriously injured annually in a variety of distracted-driver involved crashes on Maryland roadways. In 2016, 179 people lost their lives and 1,750 people were seriously injured in distracted-driver involved crashes.

In FFY 2017, law enforcement agencies were part of an ambitious HVE plan for the months of October and April (National Distracted Driving Awareness Month). Additionally the MSP conducted distracted driving enforcement statewide, issuing more than 1,400 citations and warnings during a 15-day period in April. Statewide, police officers issued 4,240 total cell-phone related citations through MHSO grant-funded overtime.



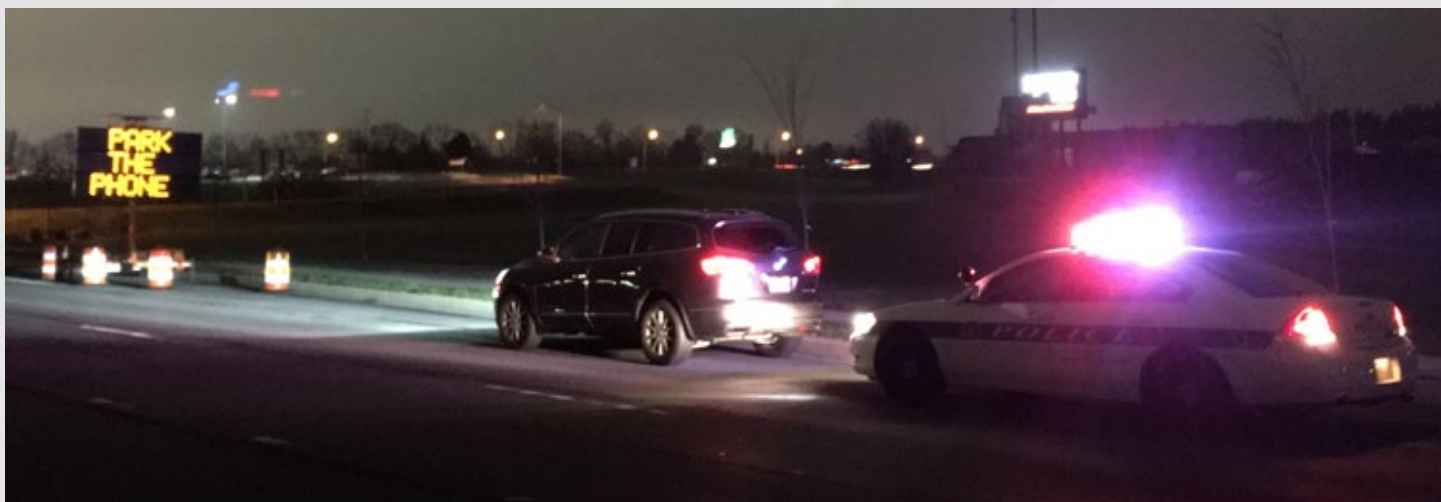
To help educate the public about Maryland's distracted driving laws, the MHSO and other partners distributed 35,000 pieces of educational materials and incentive items with the message *"Park the Phone, Before You Drive"* throughout the year, with a concentrated effort in April 2017. Materials were disseminated to groups statewide and messaging on roadway Dynamic Message Signs (DMS) helped educate drivers during the campaigns.

April's Distracted Driving Awareness Month included an \$85,000 media campaign, with the main messages being *"Park the Phone Before You Drive"* and *"Phone in One Hand, Ticket in the Other."* Media for the campaign included radio messaging and paid placement on digital and social media outlets. In addition, three video spots were used on social media and distributed to partners for their use. Throughout the campaign, more than 2.4 million impressions were achieved.

Campaign messages focused on the dangers – and the financial implications – of distracted driving.

In April 2017, the MHSO collaborated with several trauma centers throughout the State to promote distracted driving awareness. A large-scale event was held at the Prince George's Hospital Center and exhibitors included AT&T, the Washington Regional Transplant Community, Inova Hospital, Trauma Services, Washington Hospital Center, and the Prince George's County Police Department. A second event was held at the Johns Hopkins Trauma Center with MHSO staff on hand to provide brochures and educational items to those in attendance. All activities were geared toward the dangers of distracted driving and a special emphasis was placed on the dangers faced by new drivers. More than 100 people actively were engaged during these events.

**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**



deaths from drowsy driving. This pilot project was focused on healthcare professionals (including both in-hospital and out-of-hospital professionals) and provided strategies for hospital shiftworkers to decrease their risks of drowsy driving. A small part of the grant funding was used at the end of 2017, and the majority will be used in 2018.



In April 2017, MHSO staff organized the fourth of a six-webinar series with the American Society of Highway Engineers (ASHE) for employer outreach. This particular installment of the series focused on preventing distracted driving and featured presentations by MHSO staff as well as other key SHSP Distracted Driving Emphasis Area Team (EAT) members. Approximately 70 engineers participated in the webinar.

The MHSO received a \$15,000 grant award through GHSA that was funded by the National Road Safety Foundation (NRSF) to help decrease motor-vehicle crash injuries and

PROGRAM AREAS

PEDESTRIAN AND BICYCLE SAFETY

Between 2013–2015, an average of 104 pedestrians (on foot) lost their lives and 342 pedestrians were seriously injured in crashes on Maryland roadways. In 2016, 107 pedestrians (on foot) lost their lives and 419 pedestrians were seriously injured in crashes on Maryland roadways. The NHTSA FARS definition of pedestrians does not include persons on other conveyances such as skate boards or wheelchairs.

Between 2013–2015, an average of eight bicyclists lost their lives and 58 bicyclists were seriously injured annually in crashes on Maryland roadways. In 2016, 16 bicyclists lost their lives and 65 bicyclists were seriously injured in crashes on Maryland roadways.

Maryland collaborated again this year with the Metropolitan Washington Council of Governments (WASHCOG) to implement the *Street Smart* campaign to improve safety for pedestrians and bicyclists in the Washington D.C. metropolitan area, a region that includes several populous Maryland counties. This endeavor among Maryland, Virginia, and Washington D.C. featured media, high visibility enforcement, and grassroots outreach efforts.

The fall 2016 and spring 2017 *Street Smart* media and enforcement waves used the “Tired Faces” creative developed in previous years. Press events were held during both waves, along with media tours featuring Maryland transportation officials. A total of 78 television and radio news segments aired in the metropolitan area, with 3.6 million impressions and more than \$1 million in earned media value. Additionally, media posted 45 online articles including high-profile news outlets like the Washington Post.

Street Smart public awareness messaging coincided with police efforts across the region to step up enforcement

of traffic safety laws that help keep pedestrians and bicyclists safe. Fall 2016 enforcement dates were October 31–November 27, and spring 2017 enforcement dates were April 17–May 14. During the fall and spring enforcement, police issued more than 12,900 citations and 3,300 warnings to motorists, pedestrians, and bicyclists. In Maryland, the Montgomery County and the Prince George’s County police departments conducted additional enforcement efforts during the campaign timeframes.

The target audience for *Street Smart* is adults 18–49, skewing toward men. The overall media strategy focused on street-level marketing to reach target audiences in the most relevant places. Media included both English and Spanish language channels. Thanks to a successful earned media campaign and in-kind donations from paid media vendors and jurisdictional partners, *Street Smart* more than tripled its annual campaign budget. In FFY 2017, *Street Smart* garnered more than \$3 million in overall campaign value from a budget of just \$840,000. The estimated total donated media value exceeded \$675,000.

During the two campaign waves, YouTube, Facebook, Twitter, and Pandora ads delivered more than 4.5 million impressions, 246,000 audio impressions, 181,000 video views, and 7,400 clicks to BeStreetSmart.net. A TV advertisement aired more than 1,100 times across the metro area, and ads ran on buses and on gas pump toppers at 158 gas stations.

Measurements taken pre- and post-campaign gauged the effectiveness of the spring 2017 efforts. Online surveys measured awareness and attitudes among drivers and pedestrians with a representative sample of residents living in the Maryland suburbs, Northern Virginia, and D.C. The survey asked respondents if they recalled seeing *Street*

**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**



Smart ads within the past few months. The number of respondents who selected “yes” increased significantly from 22 percent to 30 percent, an all-time campaign high. The percentage of drivers who said that enforcement of traffic laws (such as yielding to pedestrians) is “somewhat strict” or “very strict” increased from 51 to 64 percent.

In partnership with the MDOT SHA, the MHSO also spent approximately \$230,000 in additional media using the *Look Up, Look Out* message during the fall 2016 and spring 2017 waves in the Baltimore metropolitan area. Billboards and radio ads ran extensively in Baltimore and Annapolis, areas that have a high number of pedestrian crashes resulting in fatalities and in serious injuries. The MHSO engaged businesses by producing coffee sleeves with pedestrian safety messaging and utilized street teams to engage pedestrians and drivers. Both media waves generated nearly 10 million impressions.

In fall 2016, WASHCOG coordinated a workshop on Best Practices in Pedestrian Enforcement. Speakers from the Metropolitan Police Department, the District Department of Transportation, Montgomery County Department of Planning, and the Montgomery County Police Department presented on the fundamentals of pedestrian safety enforcement. Approximately 30 law enforcement officers attended, including representatives from all major jurisdictions in Maryland that had a significant number of pedestrian fatalities.

Maryland’s Pedestrian and Bicycle Safety Emphasis Area Team (EAT) works to ensure that everyone in the State is provided with safe walking and bicycling environments. Comprised of educators, engineers, and enforcement representatives, the group provides a comprehensive perspective on safety issues faced by vulnerable users and coordinates implementation of the strategies and action steps in the SHSP.

The Task Force to Study Bicycle Safety on Maryland Highways was created during the 2017 legislative session of the Maryland General Assembly. MHSO Chief Tom Gianni serves as Chair of the Task Force, which is comprised of 22 people appointed by the Governor to represent various groups with bicycle safety concerns and expertise. This task force is mandated to study and make recommendations regarding a broad range of issues related to bicycle safety on highways in the State. Recommendations to the Legislature will be submitted by December 31, 2017. The 11 safety topics listed in the bill include:

- Safety issues and operations of bicycles and motor vehicles on highways throughout the State;
- Adequacy of infrastructure and issues related to traffic control devices;
- Policy implementation and public education;
- Funding to support/encourage the safe operation of bicycles in the State; and
- Bicycle infrastructure design and best practices.

PROGRAM AREAS MOTORCYCLE SAFETY

Between 2013–2015, an average of 66 people lost their lives and 256 people were seriously injured annually in motorcycle-involved crashes on Maryland roadways. In 2016, 75 people lost their lives and 299 people were seriously injured in motorcycle-involved crashes on Maryland roadways.

FFY 2017 educational efforts highlighted motorist responsibility, as well as rider responsibility and training, throughout the riding season. This year, Maryland began branding its motorcycle safety campaigns, adding specific design elements to all materials, and investing in new efforts that focused on sober riding and on rider training/safety gear. The MHSO involved leaders from the motorcycle community in developing these safety campaigns and conducted outreach through the media and to motorcycle dealers and clubs, grant-funded groups, and other partners.

Starting in May – Motorcycle Safety Awareness Month – a “Share the Road” campaign helped educate motorists on the need to stay alert for motorcycle operators. The media campaign ran through September and targeted both motorists and riders. Nearly \$50,000 was invested

2017 campaigns promoted both motorist and rider responsibility.



in billboards, television spots, web banners, social/digital ads, and direct outreach materials, including banners for MDOT MVA branch offices and Vehicle Emissions Inspection Program (VEIP) locations and yard signs for riders and safety advocates. The media campaign generated 7,550,751 impressions.

MDOT representatives joined the Maryland State Police, the Washington County Sheriff's Office, Maryland's Motorcycle Coalition, and other stakeholders to kick off Motorcycle Safety Awareness Month with a press event held in May. The message “SHARE THE ROAD WITH MOTORCYCLES - LOOK TWICE FOR BIKES” was shared with hundreds of thousands of Maryland drivers via Dynamic Message Signs on highways across the State. The signs also displayed this message during other major riding events, including the Rolling Thunder Rally and Delmarva Bike Week.

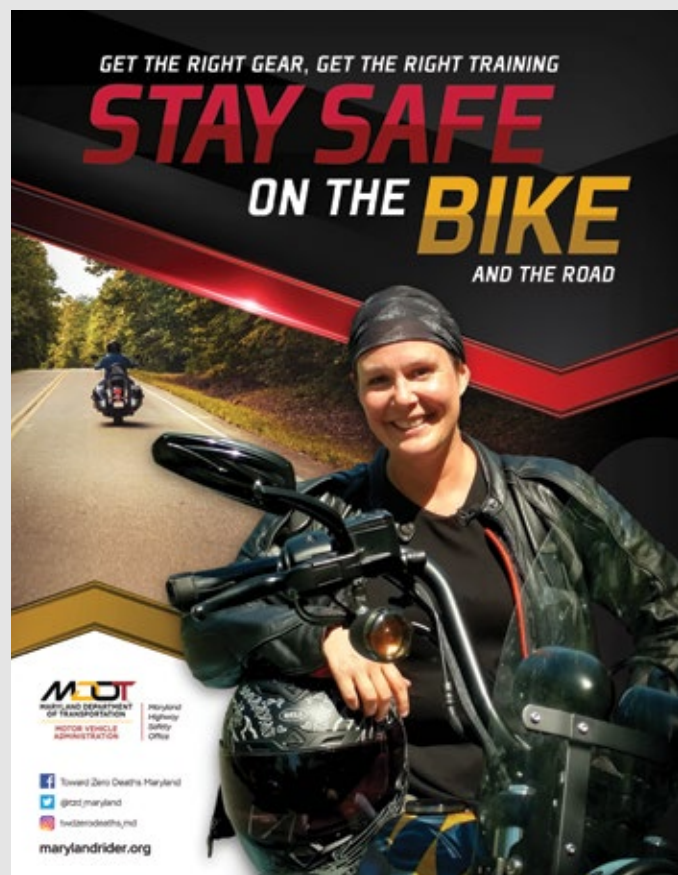
DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

In support of riders' education and training, the MHSO allocated grant funds to help support the MDOT MVA's Motorcycle Safety Program, which promotes lifelong learning and skills development. Program staff participated in the Timonium Motorcycle Show in February and Delmarva Bike Week in September. The Timonium show is Maryland's largest, as well as one of the largest on the East Coast, and attracts more than 40,000 motorcycle enthusiasts. Delmarva Bike Week is another large event that attracts more than 150,000 riders to Maryland and Delaware beaches. Staff made approximately 5,200 educational contacts and distributed more than 1,200 educational pieces during the two events.

To promote sober riding, the MHSO partnered with popular 98 Rock radio host Amelia, a rider and safety

advocate herself, on a campaign that focused on women as motorcyclists' influencers. This targeted marketing was based on data showing that 92% of those killed in an impaired-riding motorcycle crash in Maryland were men. In the PSA and other campaign materials, Amelia urges women, as influencers, to talk to their husbands, sons, brothers, and boyfriends about motorcycle safety and to only ride when sober. The partnership with 98 Rock included motorcycle safety outreach at the Maryland Food Truck Festival, which was attended by thousands of people.

Maryland also debuted new creative promoting rider responsibility that featured both cruiser motorcycles and sport bikes. Posters and digital graphics encourage riders to "Get the Right Gear, Get the Right Training."



PROGRAM AREAS

YOUNGER AND OLDER DRIVER SAFETY

YOUNGER DRIVERS

Younger and older drivers represent very different subsets of Maryland's population, but are two very pivotal groups for highway safety messaging. Effectively reaching these two segments of Maryland's population is vital to achieving our mission of moving *Toward Zero Deaths* on our roadways.

Maryland places a great deal of attention on the needs of young drivers. With roughly 400,000 people between the ages of 16 and 20, these drivers often are inexperienced and susceptible to numerous dangers while on the road. The MHSO supports parental involvement and peer-led programs, as well as partnerships with driving schools, as these strategies have been particularly effective in the past. Staff participates in the Maryland Teen Safe Driving Coalition, a group of traffic safety professionals and advocates that strives to increase the safety of young drivers. The coalition is working on a pilot project with driving schools in Baltimore County to increase parental involvement with their teen's driving education.

The MHSO continued funding the Every 15 Minutes program in Carroll County in FFY 2017. The program was held at the Francis Scott Key High School in April 2017 and successfully demonstrated the effects of impaired driving to high school students. Approximately 500 juniors and seniors, including 34 student "volunteer victims," and 60 parents participated in the two-day event, which included a mock crash, a mock trial, victim speaker panels, a mock memorial service, and an educational assembly with a video chronicling the events. It is MHSO's priority to expand these efforts in 2018.

Partners throughout the State conducted young driver safety activities at high schools in preparation for prom and after-prom parties. High-risk driving behaviors among young drivers also were highlighted at high schools and at college campuses near graduation. Grantees in Calvert, Anne Arundel, and Baltimore counties supported these educational programs at 41 high schools, reaching nearly 7,600 students.

Maryland received an \$8,000 grant from State Farm Insurance to educate teens about the importance of seat belt use and preventing distracted, impaired, and aggressive driving. The State Farm grant funds allowed for the purchase of ear buds with a buckle-up message for young driver safety events.

Using \$15,000 in grant funds from the Governors Highway Safety Association's (GHSA) *Ford Driving Skills for Life (Ford DSFL) Program*, the MHSO supported a "Teen Driver Safety Program" during NHTSA's October 2016 Teen Driver Safety Week in high schools across the State. MHSO staff contacted every county school in Maryland and encouraged each to apply. Using an online application, schools described a safe driving event that would impact and change their students' driving behaviors and decision-making skills while operating a motor vehicle. Five schools from Anne Arundel, Carroll, Calvert, and Kent counties applied and participated in the program.

The Ford DSFL events highlighted Occupant Protection, Aggressive Driving, Impaired Driving, and Distracted Driving. Students attended a one-hour interactive presentation – entitled "I AM" – that was presented by MHSO staff. "I AM" focused on the knowledge, attitudes, and behaviors of teen drivers by presenting them with

DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

crash dynamics videos, statewide crash data, and a crash scenario demo. The key takeaway was for students to acknowledge themselves as responsible for their behaviors while driving or as a passenger.

Approximately 4,150 students participated in the Ford DSFL events, which also included impaired and distracted driving games, simulators, and a photo booth. Water bottles and t-shirts (provided through partnerships) helped to incentivize teens and parents to participate. Facebook and Twitter content promoted the events and captured student and community participation. Each school also received educational kits for use throughout the year.

PARTNERSHIP WITH NATIONAL ORGANIZATIONS FOR YOUTH SAFETY (NOYS)



The MHSO joined NOYS, the Prince George's County Police Department (PGPD), and the National Transportation Safety Board (NTSB) at the Global Youth Traffic Safety Month Kickoff Event in May 2017 at the

PGPD Training Academy. About 50 high school students from Prince George's County attended the event, where the MHSO's interactive booth consisted of fatal vision goggles with a DIES Winding Sidewalk Mat and corn hole. Opening speakers included Henry P. Stawinski III, Chief of Police, PGPD; Dr. Rob Molloy, NTSB Director, Office of Highway Safety; and Kelly Melhem, MHSO Deputy Chief.

On October 16, Maryland's First Lady Yumi Hogan addressed more than 100 high school students and multiple exhibitors at NOYS' annual conference for Teen Driver Safety Awareness Week. The MHSO's exhibit focused on the consequences of unsafe teen driving behaviors and consisted of distracted driving simulators (funded by the Ford DSFL grant), a photo booth including props with traffic safety messages, Distract-A-Match game, Fatal Vision goggles/walk the line for a mock Field Sobriety Test, and a license plate messaging game.

OLDER DRIVERS

The MDOT MVA and the MHSO targeted this population at both the State and local levels. This year, the MDOT MVA implemented a three-year plan to address older and medically at-risk driver safety. Driver awareness and self-assessment, driving skills, occupant protection, and the importance of medication management were highlighted during older driver educational workshops and during the Maryland Older Driver Safety Forum.

Trained MDOT MVA and MHSO staff members engaged nearly 140 aging drivers during CarFit events with the AAA Mid-Atlantic Foundation for Safety and Education, AARP, and other partners. The CarFit program provides information on community-specific resources to enhance older driver safety, screen their driving ability, and increase overall mobility.

The MHSO also collaborated with AAA on presentations to about 50 aging drivers in Prince George's, Montgomery, and St. Mary's counties. The presentations provided safety education and tips geared toward this population of drivers.

PROGRAM AREAS

LAW ENFORCEMENT SERVICES

Enforcement is the backbone of Maryland's traffic safety program. It's a crucial component of the MHSO's emphasis on HVE, providing an unequalled opportunity to save lives. Throughout FFY 2017, the MHSO's Law Enforcement Services staff worked with police to maximize the impact of enforcement programs such as *CIOT*, *ADAPT*, *Street Smart*, and *Checkpoint Strikeforce*, as well as enforcement for distracted driving laws.

The HVE concept also fuels the MHSO's evidence-based traffic safety enforcement program activities. Maryland directs funding toward program areas that are predicted via data analysis to have the greatest impact in reducing fatalities and serious injuries resulting from crashes, and directs media activity to augment those enforcement efforts. The MHSO provides a calendar to enforcement agencies so they can plan operations during prescribed HVE periods.



The MHSO continues to employ four Law Enforcement Liaisons (LEL). These LELs are tasked with identifying the needs of police agencies and implementing solutions to meet those needs. The LELs coordinate HVE training programs and communicate details of traffic safety programs to Maryland law enforcement, as well as to major partners such as the Maryland Chiefs of Police Association (MCPA), the Maryland Sheriff's Association (MSA), and the Maryland Crash Reconstruction Committee (MCRC). In FFY 2017, the LELs launched a monthly calendar to track HVE efforts statewide.

In April 2017, the MHSO teamed up with the Maryland Municipal League Police Executives Association (MML PEA) to offer training for 113 municipal Chiefs of Police and their executive officers. This partnership allowed the highway safety message to reach smaller departments along with the larger departments that often receive more training opportunities. This endeavor enables great avenues of communication and enhanced training for these agencies.



DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

The MHSO continued implementation of Leading Effective Traffic Enforcement Programs (LETEP). LETEP focuses on providing law enforcement supervisors with advanced training regarding the use of data and countermeasures from multiple disciplines of highway safety. This approach allows those supervisors to provide law enforcement officers with the tools necessary to make quality traffic stops and arrests and to address Maryland's areas of greatest need. A total of 52 law enforcement supervisors attended and graduated from the LETEP courses held in March and September.

In June, the MHSO and the University of Maryland worked in conjunction to host the Institute of Advanced Law Enforcement Studies, more commonly referred to as the DUI College. Featuring a challenging university-level curriculum that emphasizes effective techniques to identify and arrest drivers under the influence, the DUI College brings highway safety experts, researchers, treatment and court experts, DUI prosecutors, drug recognition experts, and members of the University of Maryland faculty together in an intense training session. Officers who have successfully completed training at the DUI College demonstrate an increase in the number of impaired driving arrests and convictions obtained. Twenty-eight law enforcement officers from across the State attended the DUI College in FFY 2017.

For their annual conference in September, the MCPA and the MSA collaborated on a professional development seminar for Maryland's law enforcement executive community. MHSO enlisted the help of Maryland Chief Medical Examiner Dr. David Fowler and Epidemiologist Dr. Carolyn Cumpsty Fowler to present on the "Opioid Pandemic and Its influence on Highway Safety." This interactive session explored key lessons learned in decades of highway safety decision making. Connections to the current opioid pandemic were illustrated with data from national organizations and the Office of the Chief Medical Examiner. Also at the seminar, Sheriff Douglas Mullendore of the Washington County Sheriff's Office received the MHSO Chief's award for his role in developing



Washington County Sheriff Douglas Mullendore receives the MHSO Chief's Award (L to R: Col. Jerry Jones, MDOT MVA Administrator Christine Nizer, Sheriff Mullendore, MDOT Secretary Pete Rahn, MDOT MHSO Chief Tom Gianni)

a Strategic Highway Safety Plan for his county. More than 300 police chiefs, sheriffs, and executive officers from across the State attended this event.

During FFY 2017, the Traffic Safety Committee of the MCPA and MSA created a new monthly newsletter for Maryland's chiefs and sheriffs. "The Checkpoint" highlights current highway safety topics, data, events, and training to engage law enforcement executives in the basic responsibility of traffic enforcement.

In collaboration with the MCPA, the MSA, and the Maryland Police and Correctional Training Commissions (MPCTC), the MHSO coordinates Maryland's Traffic Safety Specialist (TSS) Program, an initiative that recognizes police officers who have attained specific levels of experience and proficiency in highway safety and traffic enforcement methods and procedures. There are approximately 1,200 officers enrolled in the program, representing 77 Maryland law enforcement agencies. An awards ceremony held in September recognized 46 new TSS Level 1 and four TSS Level 2 recipients for their achievements.

PROGRAM AREAS TRAFFIC RECORDS

Hardware, software, personnel, and procedures that capture, store, transmit, analyze, and interpret traffic safety data are critical components to Maryland's traffic records system. The datasets managed by this system include crash, driver licensing and history, vehicle registration and titling, commercial motor vehicle, roadway, injury control, citation/adjudication, and EMS/trauma registry data.

Maryland employs a two-tiered Traffic Records Coordinating Committee (TRCC), with both General (or technical) and Executive councils comprised of data owners, data managers, and data users with oversight and interest in these datasets. MHSO staff serves on the TRCC General Council and subcommittees and advises the TRCC Executive Council.



In FFY 2017, work continued to enhance Maryland's relatively new Automated Crash Reporting System (ACRS). ACRS is a significant upgrade to the previous data collection system used by law enforcement and increases the quality of data collected. In addition, the TRCC improved Maryland's E-TIX program and access to traffic safety data through grant-funded partners at the National Study Center for Trauma and EMS (NSC) and the Washington College GIS Program.

The MHSO's Traffic Records Program Manager coordinated updates to Maryland's Traffic Records Strategic Plan (TRSP) and led the implementation of recommendations provided in the 2014 Traffic Records Assessment, including the development of performance measures for all six

systems in the traffic records system. The 2016–2020 TRSP is aligned with the SHSP, and members from each Executive Council frequently discuss related topics.

The Maryland State Police (MSP), with the support of federal funding, improved and supported the new crash reporting system's accuracy and completeness, and worked on enhancement recommendations from the TRCC General Council. Monthly meetings throughout the grant year brought together multiple disciplines for reviewing backlog items. With continued development, ACRS now includes non-reportable crashes. The MSP has collected more than 35,000 non-reportable crashes. In addition, the MSP developed an electronic process for tracking DUI arrest breath tests or refusals, which account for more than 75 percent of all DUI-related arrests. Moving from a paper DUI arrests process saves officers time and streamlines the delivery of information to the MDOT MVA.

The FFY 2017 grant also provided funding for a Training Specialist who assisted with the development of new and existing training materials and documents related to ACRS within the Maryland State Police

Information Technology Division. The Training Specialist was tasked with: developing new and updating existing curriculum; assisting with hands-on and/or web-based training; updating manuals; testing updates in ACRS; coordinating with the Maryland Crash Reconstruction Committee; maintaining membership in the ACRS Task



**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**



Force; delivering training to officers at the Leading Effective Traffic Enforcement Program (LETEP) training; and contributing to the quarterly MSP newsletter, *Crash Corner*. This publication updated users on crash data collection methods and best practices, and alerted officers to new fields or elements that were pushed out to the field. *Crash Corner* was available online and there were more than 1,800 page views in total.

Maryland also continued to participate with the NHTSA in a FARS pilot program to auto-populate the crash data into the federal system. Maryland is the only state delivering data daily to the NHTSA for all crashes and not just fatal crashes.

Sponsored by the Association of Transportation Safety Information Professionals (ATSIP), the 43rd Annual International Traffic Records Forum in August 2017 brought together around 300 U.S. traffic safety professionals to focus on traffic records data. Maryland was well-represented, with presentations from current TRCC members and from MHSO grant recipients.

The University of Maryland's National Study Center (NSC) provides analytical support to the MHSO and its partners and serves as a data resource for all traffic

safety professionals. Through accessibility and integration of multiple traffic records data systems, the NSC continued the Maryland Crash Outcome Data Evaluation System (CODES) project and provided unmatched data support to the traffic safety community through data products including maps, tables, summary reports,

**Maryland is the only state
that reports daily on all crash
data, not just fatalities, to NHTSA.**

presentations, instruction, and consultation. The NSC also provided analysis to the MHSO to support funding allocation decisions, updating a methodology that incorporated safety program areas identified as the most prevalent factors related to motor vehicle crashes in Maryland. By applying a specific weighting regimen, the formula provides a guide for highway safety funding that applies the most money to areas with the most problems

2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

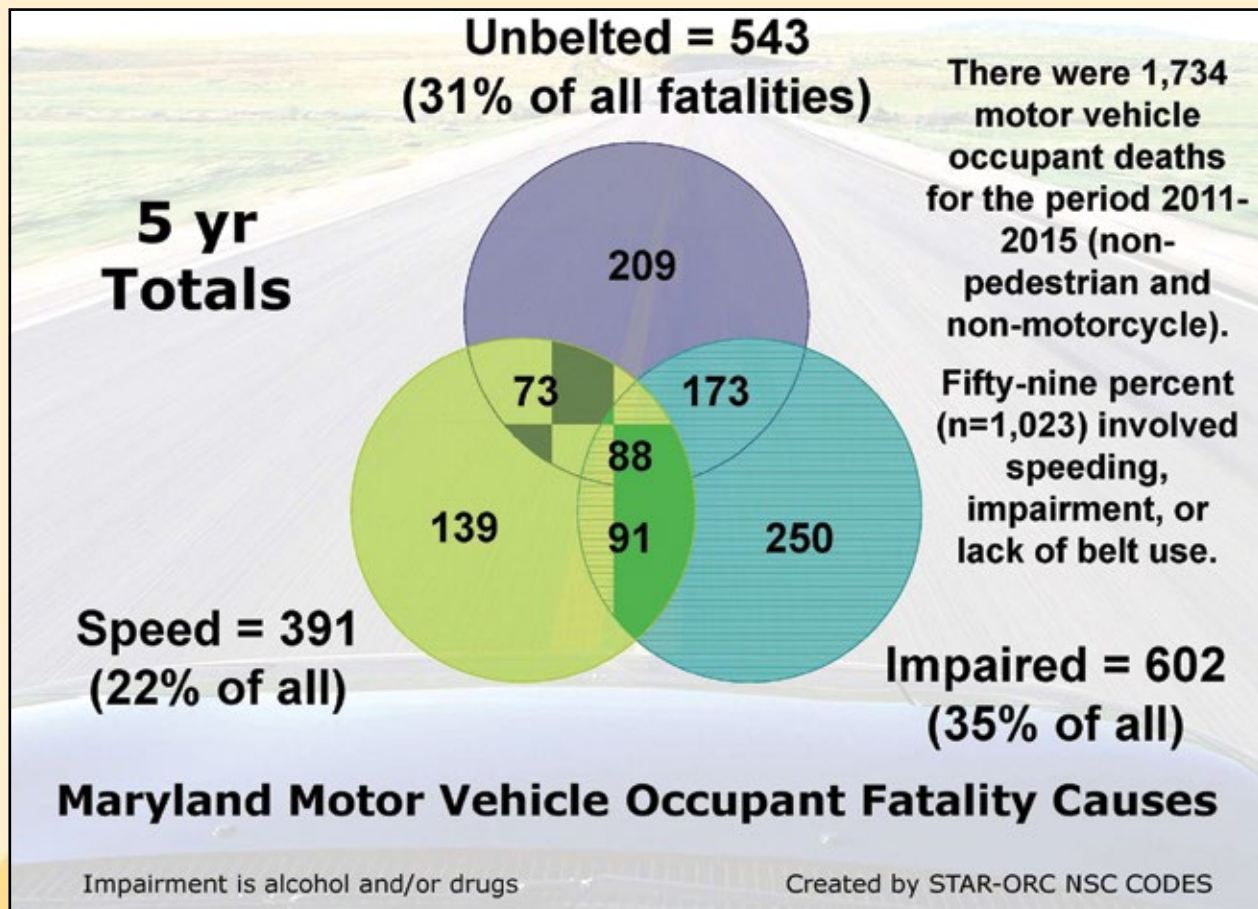
and are most capable of reducing the State's serious injury and fatal crashes. This funding methodology ensures that Maryland's funding decisions are data-driven.

In FFY 2017, NSC staff made 17 public presentations, including at the National Traffic Records Forum and at Michigan's 2017 Traffic Safety Conference. Presentations included information on Maryland's data linkage and provided suggestions to help bring data partners to the table to facilitate linkage efforts. Several presentations to the SHSP Executive Council and to EATs described the methodology used to develop the targets and goals for the State's various highway safety plans.

The NSC continued to analyze the annual occupant protection survey and compile the final report. For the

first time in Maryland, the NSC conducted backseat observations, data that will be critical to strengthening seat belt laws and achieving full seat belt use in all seats at all times. In addition, NSC staff analyzed and reported on the results of a law enforcement survey regarding the enforcement of existing seat belt laws.

The Washington College GIS Program provides support staff to the MHSO to improve accessibility to traffic safety data and to improve the completeness and accuracy of this data. The program focuses on three main objectives: providing the MHSO with maps of crash and citation data for use in program planning and evaluation; providing training to traffic safety professionals on the use of GIS analytical tools; and increasing the completeness and accuracy of Statewide crash data and the accuracy of citation data.



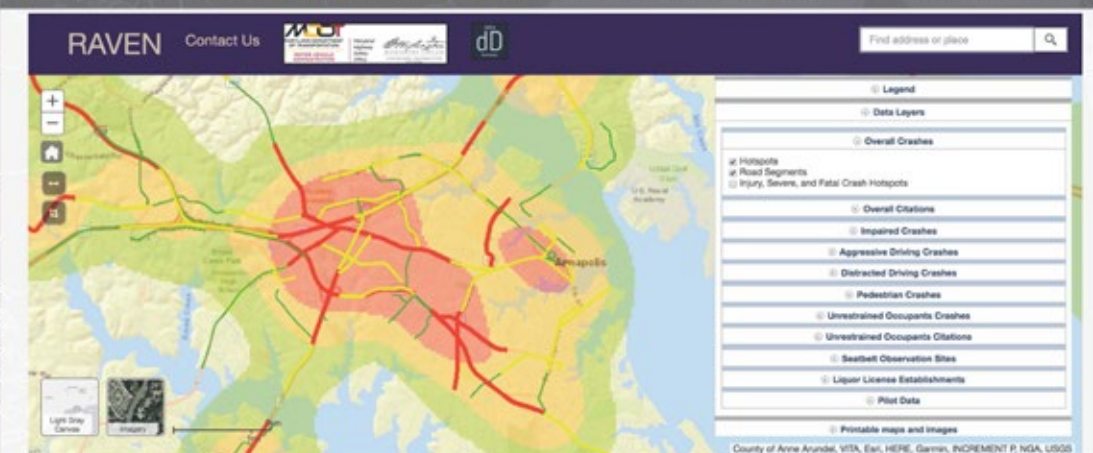
RAVEN

Risk Analysis of Vehicle Environment Network

WHAT: This free web application displays and analyzes crash and electronic citation data (E-TIX) for every Maryland jurisdiction.

WHY: Easily analyze crash and E-TIX trends and spatial statistics for your local area. The map's layers correlate with High Visibility Enforcement (HVE) campaigns that target dangerous behaviors such as aggressive, impaired, and distracted driving, and lack of restraint use.

WHO: RAVEN is a resource for law enforcement, traffic-safety, and injury-prevention professionals.



Map Layers

Hotspots and One-Mile Road Segments

- Overall Crashes
- Traffic Violations (E-TIX)
- Impaired Driving Crashes
- Aggressive Driving Crashes
- Distracted Driving Crashes
- Unrestrained Occupants

Point Layers

- Seatbelt Use Observation Sites/Rates
- Liquor License Establishments

Additional Features

- **Calendar:**
View MDOT Highway Safety Office HVE dates.
- **Data Dictionary:**
Explains the methodology and symbology behind the web map layers.
- **Downloads:**
Additional resources: Data Dictionary, HVE Guide, etc.
- **Make a Request for Customized Data Products/Analysis**
- **Training Sessions/Events**



Register at:
<http://raven.washcoll.edu/mhso/public/register>

For access/information contact:
wu_mhso@washcoll.edu

Version Date: July 2017

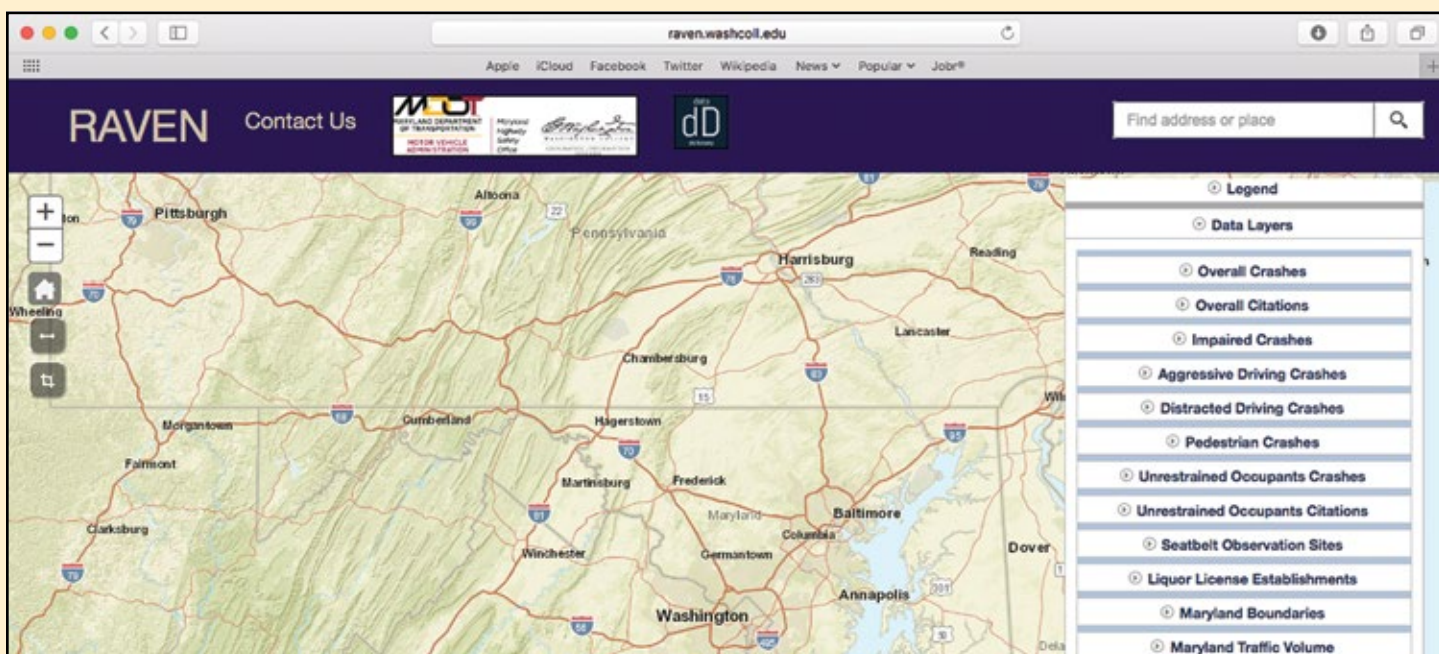
2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

The Washington College GIS Program continued to provide high-level technical, analytical, and geospatial support throughout Maryland relative to traffic safety. This support is provided to local/county/State law enforcement, the MDOT, and other highway safety partners. Throughout the year, the program's students and staff produced more than 1,000 maps, statistical analyses, geospatial layers, presentations, and detailed data reports.

Washington College GIS Program's web application RAVEN, or Risk Analysis of Vehicle Environmental Network, has been used in advertisements, newsletters, presentations, and training sessions throughout the State. More than 100 law enforcement officers were trained on the application during in-person sessions and five webinars. RAVEN has more than 550 registered users, including more than 200 officers, and more than 25 useable geo-spatial layers that give users the ability to toggle through various citation and traffic safety datasets. Washington College has provided training and demonstrations for RAVEN to a wide range of vital traffic safety partners.

The GIS Program team collaborates with the MHSO to improve accessibility to traffic safety data through quality control and assurance processes, to collect and understand the data needed for analysis, and to support the MSP SPIDRE team. Washington College also provided density maps for aggressive-driving related crashes in all jurisdictions to help with HVE deployments, and conducted analysis of E-TIX data to support the SHSP Aggressive Driving EAT.

The Washington College GIS Program is instrumental to supporting traffic safety.



DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

The products and analysis provided by Washington College are made possible by their highly qualified team of GIS experts who are collecting and maintaining data for a risk terrain analysis in Maryland. The use of a data-driven approach is key to allocating resources to prevent alcohol-related traffic crashes, injuries, and deaths.

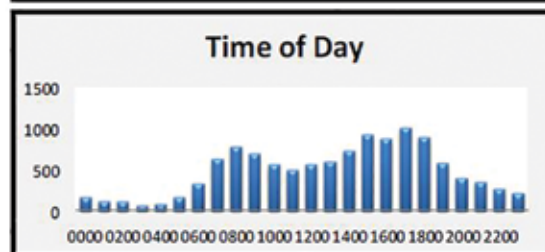
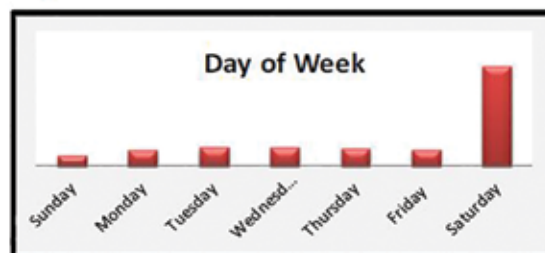
GIS staff works with county liquor boards to maintain a one-of-its-kind statewide liquor board license database,

which includes information about licensee locations and hours, as well as violations. Integrating this dataset with crash and DUI arrest data allows analysts to paint a picture of high density DUI activity areas to be targeted with enforcement and educational strategies. Washington College also maintained E-TIX data and improved location data for better spatial analysis.

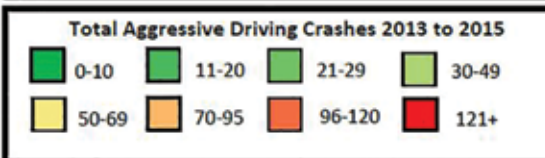
Date and Time Comparison

Montgomery Aggressive Crash Behavior Analysis for 2013 to 2015

Time/Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Grand Total
0000	43	17	11	16	21	23	40	171
0100	34	16	8	14	13	16	18	119
0200	29	13	9	10	11	10	30	112
0300	26	9	4	4	3	3	18	67
0400	16	12	7	12	8	11	19	85
0500	14	26	28	23	38	31	10	170
0600	18	52	57	78	59	45	22	331
0700	27	86	127	124	123	111	41	639
0800	37	104	169	155	148	124	44	781
0900	42	103	151	117	120	100	58	691
1000	63	85	87	80	96	83	66	560
1100	44	59	80	74	80	73	97	507
1200	71	88	90	83	75	75	86	568
1300	61	87	91	87	78	99	100	603
1400	79	109	130	124	101	97	96	736
1500	85	137	149	149	135	174	100	929
1600	70	145	133	121	145	169	97	880
1700	65	163	186	167	181	169	86	1017
1800	63	131	156	178	155	130	88	901
1900	67	80	85	80	112	94	64	582
2000	40	57	59	46	67	75	52	396
2100	51	38	41	60	47	61	54	352
2200	31	30	29	36	46	45	55	272
2300	26	23	24	18	24	52	42	209
Grand Total	1,102	1,670	1,911	1,856	1,887	1,872	1,383	11,681



Time and Day Area of Focus	
Mondays to Fridays from 1500—1800	
Tuesday to Fridays from 0700—0800	
Tuesdays at 0800	



Maryland Department of Transportation

WASHINGTON COLLEGE
GEOGRAPHIC INFORMATION SYSTEMS

PROGRAM AREAS COMMUNICATIONS & SOCIAL MEDIA

The MHSO coordinated more than \$3,166,545 million in media funding in FFY 2017, spanning all major statewide program areas as well as local events and projects. All campaigns fall under Maryland's Toward Zero Deaths umbrella, and the goal of the MHSO is to utilize media to augment ongoing enforcement efforts to complete the HVE model.

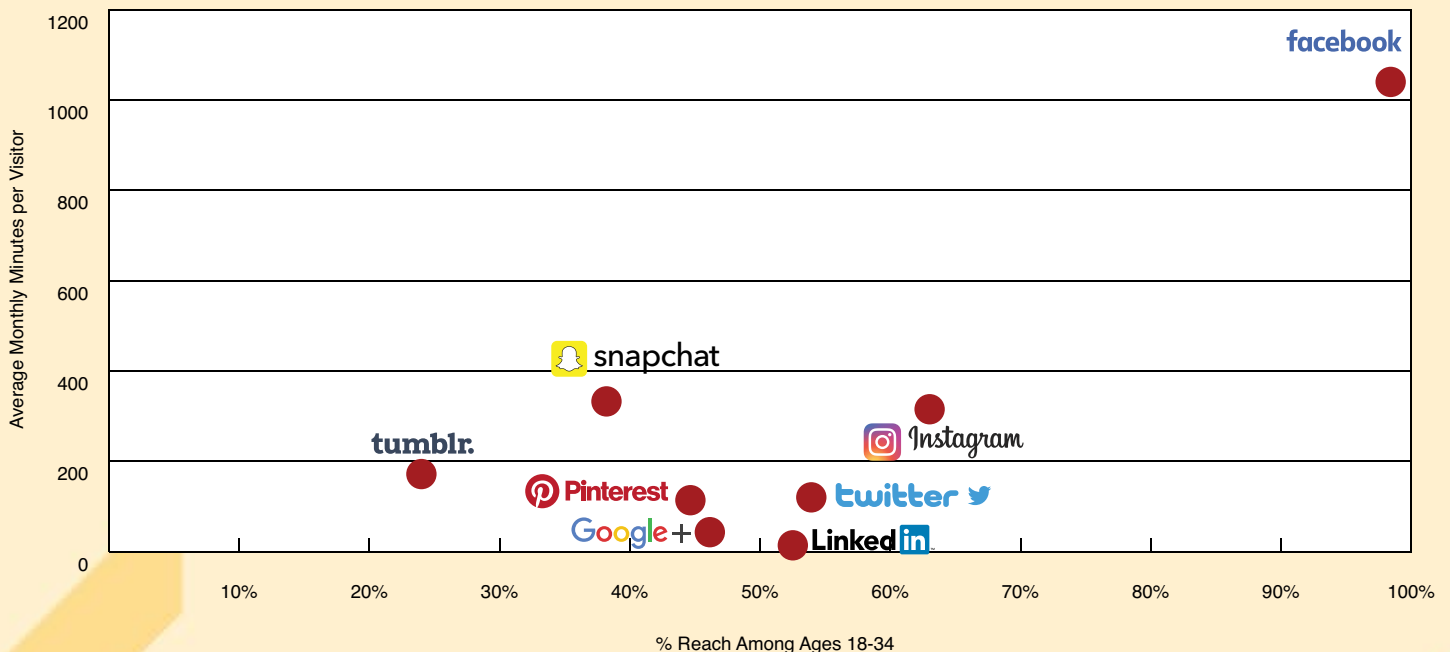
Across all campaigns, the MHSO achieved more than 319,724,420 million impressions in FFY 2017. The MHSO always attempts to maximize the amount of earned media through events, donated advertising, organically shared social media postings, and grassroots efforts. The table on page 62 is a representation of the dollars spent on various communications efforts throughout the year,

as well as vital information concerning earned media impressions. This year the MHSO developed innovative media and sports partnerships including working with the Baltimore Orioles in April for a distracted-driving campaign and in May for Click It or Ticket.

The MHSO continued to see steady social media audience increases on Facebook and Twitter during FFY 2017 and devoted more time and effort into expanding its audience on Instagram, a platform that has a high reach among our target audience of 18- to 34-year-olds. MHSO's web site, towardzerodeathsmd.com, was visited 33,629 times by 20,802 people.

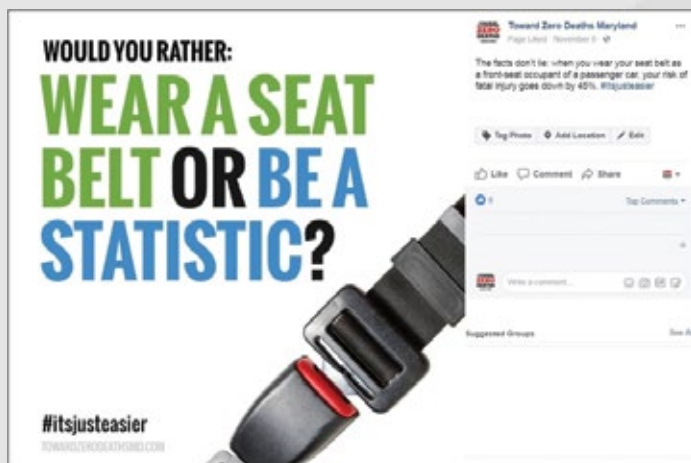
Ages 18-34 Digital Audience Penetration vs. Engagement of Leading Social Networks

Source: comScore Media Metrix Multi-Platform, U.S., Dec 2015



DEDICATED TO SAVING LIVES AND PREVENTING INJURIES ON MARYLAND ROADWAYS.

The MHSO continued to emphasize social media advertising that targeted negative driving behaviors, including distracted driving, aggressive driving, and impaired driving. Additional elements promoted seat belt use and child passenger safety. Two different sets of advertisements used in FFY 2017 included “Don’t Be That Driver” and “It’s Just Easier.” Both campaigns followed a theme of presenting real-life situations and promoting positive decisions.



Through its media contract, the MHSO funded additional outreach presence with the Alliance Highway Safety company. The effort reached an estimated 15,150 attendees at beer and wine festivals, sporting events, and other outreach venues. Alliance promoted impaired-driving and distracted-driving prevention messages while also promoting seat belt use. This presence provided opportunities for engagement with activities such as fatal vision demonstrations, driving simulators, and photo booths. This presence provided opportunities for engagement with activities such as fatal vision demonstrations, driving simulators, and photo booths and offered prominent branding and visibility for all safety programs.



2017 MARYLAND HIGHWAY SAFETY OFFICE ANNUAL REPORT

Campaign Name	Program Area	Campaign Time Frame	Media Outlets Utilized	Paid Media	Earned Media	Total Media	Total Impressions
SPIDRE	Impaired Driving Prevention	October 2016 - September 2017	Television (press event news coverage), radio, digital media, billboards, press releases, newspaper articles, social media	\$50,000	\$20,000	\$70,000	5,145,000
StreetSmart DC *	Pedestrian/ Bicycle Safety	Fall 2016 Spring 2017	Radio, digital media, billboards, transit ads, gas pump ads, television, press releases, newspaper articles, social media, street teams	\$225,000	\$1,500,000	\$1,725,000	162,000,000
Park the Phone Before you Drive	Distracted Driving Prevention	October 2016 & April 2017	Radio, digital media, social media	\$100,000	\$5,000	\$115,000	6,839,675
Click It or Ticket	Occupant Protection	November 2016 & May 2017	Radio, digital media, gas pump top advertising, social media, business partnerships (Chick-fil-A, Antwerpen Automotive)	\$250,000	\$51,545	\$301,545	23,462,135
Motorcycle Safety	Motorcycle Safety	May/June 2017	Radio, digital media, billboards, press releases, newspaper articles, social media	\$125,000	\$52,000	\$177,000	7,550,000
ADAPT	Aggressive Driving Prevention	March 2017 May 2017 July 2017	Radio, television, digital media, billboards, gas pump toppers, social media	\$230,000	\$10,000	\$210,000	32,027,115
Drive Sober or Get Pulled Over & Checkpoint Strikeforce	Impaired Driving Prevention	Various mobilizations throughout the year (i.e. Halloween, New Year's, St. Patrick's Day, Cinco de Mayo, Independence Day)	Television, radio, digital media, bar/restaurant/ liquor store messaging, press releases, newspaper articles, social media	\$366,000	\$40,000	\$406,000	55,700,495
StreetSmart Baltimore	Pedestrian/ Bicycle Safety	Fall 2016	Radio, digital media, billboards, mall media, street teams, social media, business outreach	\$150,000	\$12,000	\$162,000	27,000,000
* Total Impressions figure includes a "potential outdoor viewership" calculation that is included by the vendor and which is not included in the Total Impressions of other campaigns				Total Media		\$3,166,545	319,724,420

LOOKING TO THE FUTURE

In contrast to the six percent increase seen nationally, traffic fatalities in Maryland rose very slightly from 2015 to 2016, up from 521 to 522. As a percentage, that increase is about one-fifth of one percent. But the reality is that 522 people lost their lives on Maryland roads in one year, and each one of those tragedies is a story of a lost loved one, friend, coworker, or neighbor.

The increase from 2015 to 2016 represents one life. It represents one father, mother, child, sibling, or grandparent. It represents one life cut short because someone chose to drive impaired, or use a cell phone while driving, or not use a seat belt. That one life lost represents the power of choice – and the deadly consequences that just one wrong or risky choice made while driving can have.

Driving is a privilege, and it must be earned. Even more, our responsibilities while driving continue throughout our lives. All too often, that does not happen. The concept of personal responsibility is a key aspect of Maryland's safety programs and campaigns, and plays a vital role in public events and other forms of outreach. The MHSO promotes self-awareness as it relates to driving and traffic safety. Only when everyone participates in a culture of safety will there truly be substantial and sustained decreases in traffic fatalities.

In FFY 2017, many local partners began or continued the process of creating their own SHSPs. The goal is to further a safety culture by tailoring the State's SHSP to the unique needs of local jurisdictions. These local plans will be a major point of emphasis in Maryland for years to come, as they will allow local and personal ownership of critical traffic safety issues in communities.

The MHSO remains committed to helping our partners in our shared goal of moving *Toward Zero Deaths*. The only acceptable number of traffic fatalities is zero. Every crash matters, and every life counts.



GRANTS AND SPENT AMOUNTS

Project Number	Agency	State Funds Spent	NHTSA Funds Spent	Total Spent
LE 17-067	Aberdeen Police Department		\$8,386.72	\$8,386.72
LE 17-027	Allegany County Sheriff's Department	\$1,483.50	\$8,879.50	\$10,363.00
LE 17-019	Annapolis Police Department		\$20,705.19	\$20,705.19
GN 17-033	Anne Arundel County Council of PTAs		\$9,000.00	\$9,000.00
GN 17-027	Anne Arundel County Department of Health		\$11,890.00	\$11,890.00
LE 17-018	Anne Arundel County Police Department	\$15,622.03	\$48,497.74	\$64,119.77
LE 17-065	Baltimore City Police Department	\$6,895.23	\$36,353.98	\$43,249.21
GN 17-011	Baltimore County Police Department, Crash Recon		\$38,241.94	\$38,241.94
GN 17-076	Baltimore County Department of Health		\$10,500.00	\$10,500.00
LE 17-052	Baltimore County Police Department - TMU	\$87,440.03	\$177,579.57	\$265,019.60
LE 17-066	Bel Air Police Department	\$999.74	\$6,822.96	\$7,822.70
LE 17-061	Berlin Police Department		\$2,815.93	\$2,815.93
GN 17-085	Calvert Alliance Against Substance Abuse		\$4,602.25	\$4,602.25
LE 17-036	Calvert County Sheriff		\$25,767.45	\$25,767.45
LE 17-022	Cambridge Police Department		\$7,500.00	\$7,500.00
LE 17-033	Caroline County Sheriff		\$11,794.99	\$11,794.99
LE 17-021	Carroll County Sheriff	\$1,500.00	\$16,013.14	\$17,513.14
LE 17-068	Cecil County Sheriff		\$12,435.51	\$12,435.51
LE 17-060	Charles County Sheriff	\$13,284.87	\$42,954.10	\$56,238.97
GN 17-081	Chesapeake Region Safety Council		\$283,673.21	\$283,673.21
LE 17-070	Cheverly Police Department		\$2,935.98	\$2,935.98
LE 17-039	City of Bowie Police Department		\$4,406.02	\$4,406.02
LE 17-032	Cumberland Police Department		\$2,545.74	\$2,545.74
LE 17-056	Easton Police Department		\$13,686.38	\$13,686.38
LE 17-064	Elkton Police Department		\$7,581.83	\$7,581.83
GN 17-035	Every 15 Minutes/Sykesville Freedom District Fire Department		\$4,037.56	\$4,037.56
LE 17-029	Frederick Police Department	\$3,368.81	\$19,217.96	\$22,586.77
LE 17-028	Frostburg State University Police		\$1,170.86	\$1,170.86
LE 17-071	Gaithersburg Police Department		\$23,347.52	\$23,347.52

**DEDICATED TO SAVING LIVES AND PREVENTING
INJURIES ON MARYLAND ROADWAYS.**

Project Number	Agency	State Funds Spent	NHTSA Funds Spent	Total Spent
LE 17-020	Greenbelt Police Department	\$589.89	\$20,705.94	\$21,295.83
LE 17-044	Hagerstown Police Department		\$6,052.51	\$6,052.51
LE 17-007	Hampstead Police Department		\$3,181.09	\$3,181.09
GN 17-042	Harford County DUI Court		\$36,650.00	\$36,650.00
LE 17-062	Harford County Sheriff	\$13,748.44	\$107,553.26	\$121,301.70
LE 17-063	Havre de Grace Police Department		\$2,194.64	\$2,194.64
LE 17-008	Howard County Department of Police		\$60,460.36	\$60,460.36
LE 17-046	Hyattsville Police Department	\$729.95	\$2,296.30	\$3,026.25
LE 17-048	Kent County Sheriff		\$5,810.03	\$5,810.03
LE 17-014	Laurel Police Department		\$13,121.87	\$13,121.87
GN 17-036	Maryland Chiefs of Police Association		\$129,894.64	\$129,894.64
GN 17-037	Maryland Department of Health		\$232,924.18	\$232,924.18
GN 17-097	Maryland Institute for Emergency Services	\$4,479.66	\$1,359.92	\$5,839.58
GN 17-001	Maryland Institute for Emergency Services, CPS		\$60,312.62	\$60,312.62
GN 17-028	Maryland Judiciary - Anne Arundel County		\$67,244.70	\$67,244.70
GN 17-003	Maryland Judiciary - Howard County		\$28,444.49	\$28,444.49
GN 17-047	Maryland Municipal League PEA		\$2,583.00	\$2,583.00
GN 17-049	Maryland MVA, Motorcycle		\$9,670.39	\$9,670.39
GN 17-078	Maryland Police and Correctional Training, TSS		\$13,167.40	\$13,167.40
GN 17-039	Maryland Sheriffs' Association		\$24,468.88	\$24,468.88
GN 17-040	Maryland State Police - DRE		\$96,813.84	\$96,813.84
GN 17-045	Maryland State Police - IT Division	\$238,526.24	\$94,319.83	\$332,846.07
GN 17-041	Maryland State Police - Mobile Unit		\$454,597.51	\$454,597.51
LE 17-053	Maryland State Police Statewide - Regular	\$18,597.38	\$613,485.93	\$632,083.31
LE 17-054	Maryland State Police Statewide - SPIDRE		\$869,321.28	\$869,321.28
GN 17-034	Maryland State's Attorneys' Association		\$150,939.70	\$150,939.70
LE 17-026	Maryland Transportation Authority Police Department		\$45,137.54	\$45,137.54
LE 17-076	Maryland Transportation Authority Police Department		\$17,945.62	\$17,945.62
GN 17-056	Metropolitan Washington Council of Governments	\$189,416.00		\$189,416.00
LE 17-031	Montgomery County Police Department	\$59,386.68	\$154,143.36	\$213,530.04
LE 17-013	Montgomery County Sheriff		\$7,918.06	\$7,918.06
GN 17-074	Mothers Against Drunk Driving		\$32,321.96	\$32,321.96
GN 17-086	Motor Vehicle Administration - Drivers Instruction		\$19,087.56	\$19,087.56

Project Number	Agency	State Funds Spent	NHTSA Funds Spent	Total Spent
LE 17-042	New Carrollton Police Department		\$2,000.00	\$2,000.00
LE 17-025	Ocean City Police Department	\$7,775.00	\$26,488.43	\$34,263.43
LE 17-040	Prince George's County Police Department	\$70,305.88	\$152,280.74	\$222,586.62
LE 17-051	Princess Anne Police Department	\$744.11	\$4,404.05	\$5,148.16
LE 17-034	Queen Anne's County Sheriff		\$7,740.07	\$7,740.07
LE 17-024	Riverdale Park Police Department	\$750.00	\$2,788.22	\$3,538.22
LE 17-072	Rockville Police Department		\$18,594.08	\$18,594.08
LE 17-023	Salisbury Police Department		\$12,252.79	\$12,252.79
LE 17-035	Somerset County Sheriff		\$1,250.00	\$1,250.00
GN 17-072	St. Mary's County Circuit Court		\$25,120.83	\$25,120.83
LE 17-045	St. Mary's County Sheriff		\$22,030.29	\$22,030.29
LE 17-017	Sykesville Police Department		\$3,500.00	\$3,500.00
LE 17-069	Talbot County Sheriff		\$3,323.21	\$3,323.21
LE 17-012	Taneytown Police Department		\$3,245.48	\$3,245.48
LE 17-050	Town of La Plata Police		\$7,297.22	\$7,297.22
GN 17-092	University of Baltimore, Schaefer Center		\$14,442.26	\$14,442.26
GN 17-088	University of Maryland, Baltimore - ME		\$33,796.61	\$33,796.61
GN 17-008	University of Maryland, Baltimore, CCODES - Seat Belt		\$76,935.99	\$76,935.99
GN 17-060	University of Maryland, Baltimore, CCODES - Traffic Records		\$317,039.35	\$317,039.35
GN 17-094	University of Maryland College Park SPIDRE Evaluation		\$90,186.54	\$90,186.54
LE 17-058	University of Maryland College Park, Enforcement	\$3,240.00	\$11,526.50	\$14,766.50
LE 17-057	University Park Police Department	\$202.65	\$792.80	\$995.45
GN 17-046	Washington College		\$340,633.97	\$340,633.97
LE 17-043	Washington County Sheriff		\$14,332.50	\$14,332.50
GN 17-031	Washington Regional Alcohol Program - Media		\$864,183.41	\$864,183.41
GN 17-032	Washington Regional Alcohol Program - Meeting Support		\$6,453.93	\$6,453.93
LE 17-003	Westminister Police Department		\$5,760.42	\$5,760.42
LE 17-041	Wicomico County Sheriff		\$7,062.91	\$7,062.91
GN 17-066	Worcester County Health Department		\$1,801.65	\$1,801.65
LE 17-059	Worcester County Sheriff		\$3,073.05	\$3,073.05
	Totals by Funding Source	\$739,086.09	\$6,327,809.74	\$7,066,895.83



Facebook: [TowardZeroDeathsMD](#)



Twitter: [@TZD_maryland](#)



Instagram: [twdzerodeaths_md](#)



LARRY HOGAN
Governor



BOYD K. RUTHERFORD
Lt. Governor



PETE K. RAHN
Secretary, Maryland Department of Transportation



MARYLAND DEPARTMENT OF TRANSPORTATION
mdot.maryland.gov

MARYLAND HIGHWAY SAFETY OFFICE
mva.maryland.gov/safety

TOWARD ZERO DEATHS
towardzerodeathsmd.com
[facebook.com/ towardzerodeathsmd](https://facebook.com/towardzerodeathsmd)
twitter.com/tzd_maryland
instagram.com/twdzerodeaths_md

